```
Volume serial number is OCDO-03E4
C:.
   .env
  .gitignore
| main without predict.py
  project-structure.pdf
   project-structure.txt
  requirements.txt
   tattoo_labels.csv
+---app
| | main.py
   | __init__.py
   +---api
  | | admin_api.py
   | | availability_api.py
   | | predict_api.py
  | \---_pycache__
            predict api.cpython-311.pyc
             __init__.cpython-311.pyc
  +---core
  | | auth.py
   | | config.py
   | | static_files.py
     | templates.py
   1
      | __init__.py
   | |
   | \---_pycache__
             auth.cpython-311.pyc
             config.cpython-311.pyc
             static files.cpython-311.pyc
             templates.cpython-311.pyc
              __init__.cpython-311.pyc
  +---models
  | | classifier.py
     | labels.py
   | yolo_model.py
     | __init__.py
   1
     - 1
  | \---_pycache__
  classifier.cpython-311.pyc
             labels.cpython-311.pyc
  yolo model.cpython-311.pyc
             __init__.cpython-311.pyc
```

Folder PATH listing for volume Windows-SSD

```
| +---routes
| | cancel_booking.py
  | | chat.py
  | | home.py
  | \---__pycache__
           cancel_booking.cpython-311.pyc
            chat.cpython-311.pyc
           home.cpython-311.pyc
  +---services
  | calendar_integration.py
  | | preprocessing.py
  | | pricing.py
   | __init__.py
  | \---__pycache__
calendar_integration.cpython-311.pyc
           preprocessing.cpython-311.pyc
           pricing.cpython-311.pyc
             __init__.cpython-311.pyc
+---static
  | | admin.html
  | | favicon.ico
  | +---scripts
  | | admin.js
           main.js
  | |
   1 1
  | \---styles
       inline.css
  +---templates
        index.html
| +---utils
  | | calendar utils.py
| \--- pycache
           calendar_utils.cpython-311.pyc
\---__pycache__
        main.cpython-311.pyc
         __init__.cpython-311.pyc
+---data
| | output.json
  | tattoo-booking-ai-b1218efcac81.json
  | tattoo_labels.csv
```

```
\---test_images
          test_image.jpg
          test_image1.jpg
          test_image2.jpg
          test_image3.jpg
          test_image4.jpg
+---models
       tattoo_classifier.pth
1
       yolo11n.pt
       yolov8m.pt
       yolov8n.pt
+---notebooks
       train tattoo classifier.py
1
+---scripts
      add_calendar.py
fetch_events.py
list_calendars.py
       test_event_creation.py
+---static
      favicon.ico
      styles.css
+---tests
ı
      test calendar.py
      test_tattoo_classifier.py
+---venv
| | pyvenv.cfg
| +---Include
| +---Lib
| \---site-packages
         | distutils-precedence.pth
          | google_auth_httplib2.py
          | isympy.py
          | numpy-2.1.1-cp311-cp311-win amd64.whl
          | pylab.py
             scipy-1.15.2-cp311-cp311-win_amd64.whl
          | six.py
              typing_extensions.py
          1
   +---annotated_types
| | py.typed
         | | test_cases.py
| | __init__.py
         | \---_pycache__
```

```
test_cases.cpython-311.pyc
           __init__.cpython-311.pyc
+---annotated_types-0.7.0.dist-info
       INSTALLER
1
       METADATA
       RECORD
       WHEEL
   \---licenses
           LICENSE
+---anyio
       from_thread.py
       lowlevel.py
       py.typed
       pytest_plugin.py
       to_interpreter.py
       to_process.py
       to_thread.py
        __init__.py
   +---abc
           _eventloop.py
           resources.py
           _sockets.py
           _streams.py
           _subprocesses.py
           _tasks.py
           testing.py
           __init__.py
       \---_pycache__
               _eventloop.cpython-311.pyc
               _resources.cpython-311.pyc
               _sockets.cpython-311.pyc
               _streams.cpython-311.pyc
               _subprocesses.cpython-311.pyc
               _tasks.cpython-311.pyc
               testing.cpython-311.pyc
                __init__.cpython-311.pyc
   +---streams
           buffered.py
           file.py
           memory.py
           stapled.py
           text.py
           tls.py
           __init__.py
```

```
\---__pycache__
            buffered.cpython-311.pyc
            file.cpython-311.pyc
            memory.cpython-311.pyc
            stapled.cpython-311.pyc
            text.cpython-311.pyc
            tls.cpython-311.pyc
            init .cpython-311.pyc
+---_backends
      _asyncio.py
       _trio.py
        __init__.py
    \---_pycache_
            _asyncio.cpython-311.pyc
            _trio.cpython-311.pyc
            __init__.cpython-311.pyc
+---_core
        _asyncio_selector_thread.py
        _eventloop.py
        exceptions.py
        _fileio.py
        resources.py
        _signals.py
        _sockets.py
        streams.py
        _subprocesses.py
        synchronization.py
        _tasks.py
        _tempfile.py
        _testing.py
        _typedattr.py
        __init__.py
   \---__pycache__
            _asyncio_selector_thread.cpython-311.pyc
            _eventloop.cpython-311.pyc
            exceptions.cpython-311.pyc
            _fileio.cpython-311.pyc
            _resources.cpython-311.pyc
            _signals.cpython-311.pyc
            _sockets.cpython-311.pyc
            _streams.cpython-311.pyc
            _subprocesses.cpython-311.pyc
            _synchronization.cpython-311.pyc
            _tasks.cpython-311.pyc
            _tempfile.cpython-311.pyc
            _testing.cpython-311.pyc
            typedattr.cpython-311.pyc
```

```
__init__.cpython-311.pyc
     \---_pycache__
            from_thread.cpython-311.pyc
            lowlevel.cpython-311.pyc
            pytest_plugin.cpython-311.pyc
            to_interpreter.cpython-311.pyc
            to process.cpython-311.pyc
            to_thread.cpython-311.pyc
            __init__.cpython-311.pyc
 +---anyio-4.9.0.dist-info
        entry points.txt
         INSTALLER
         LICENSE
        METADATA
         RECORD
         top_level.txt
         WHEEL
 +---apiclient
 | \---__pycache__
           init .cpython-311.pyc
 +---cachetools
 | | func.py
     | keys.py
         _decorators.py
         __init__.py
    \---__pycache__
            func.cpython-311.pyc
            keys.cpython-311.pyc
            _decorators.cpython-311.pyc
            __init__.cpython-311.pyc
 +---cachetools-5.5.2.dist-info
        INSTALLER
        LICENSE
         METADATA
         RECORD
         top_level.txt
         WHEEL
 +---certifi
 | | cacert.pem
 | | core.py
 | | py.typed
| | __init__.py
```

```
| | __main__.py
       1 1
       \---__pycache__
                 core.cpython-311.pyc
                  __init__.cpython-311.pyc
                  __main__.cpython-311.pyc
       +---certifi-2025.1.31.dist-info
              INSTALLER
       LICENSE
              METADATA
              RECORD
              top level.txt
              WHEEL
       +---charset_normalizer
              api.py
       cd.py
              constant.py
       legacy.py
       md.cp311-win amd64.pyd
              md.py
       1 1
              md mypyc.cp311-win amd64.pyd
       1
             models.py
             py.typed
             utils.py
              version.py
             __init__.py
              __main__.py
       - 1
       | +---cli
       | | __main__.py
             \---_pycache_
                    __init__.cpython-311.pyc
                     __main__.cpython-311.pyc
          \---__pycache__
                  api.cpython-311.pyc
                  cd.cpython-311.pyc
                  constant.cpython-311.pyc
                  legacy.cpython-311.pyc
                  md.cpython-311.pyc
                  models.cpython-311.pyc
                  utils.cpython-311.pyc
                  version.cpython-311.pyc
                  __init__.cpython-311.pyc
                  __main__.cpython-311.pyc
+---charset normalizer-3.4.1.dist-info
```

```
entry_points.txt
        INSTALLER
        LICENSE
        METADATA
        RECORD
        top_level.txt
        WHEEL
+---click
        core.py
        decorators.py
        exceptions.py
1
        formatting.py
        globals.py
        parser.py
        py.typed
        shell_completion.py
        termui.py
        testing.py
        types.py
utils.py
_compat.py
        _termui_impl.py
        _textwrap.py
        winconsole.py
        __init__.py
    \---_pycache__
            core.cpython-311.pyc
            decorators.cpython-311.pyc
            exceptions.cpython-311.pyc
            formatting.cpython-311.pyc
            globals.cpython-311.pyc
            parser.cpython-311.pyc
            shell_completion.cpython-311.pyc
            termui.cpython-311.pyc
            testing.cpython-311.pyc
            types.cpython-311.pyc
            utils.cpython-311.pyc
            compat.cpython-311.pyc
            _termui_impl.cpython-311.pyc
            _textwrap.cpython-311.pyc
            _winconsole.cpython-311.pyc
            __init__.cpython-311.pyc
+---click-8.1.8.dist-info
|
        INSTALLER
        LICENSE.txt
        METADATA
        RECORD
        WHEEL
```

```
+---colorama
ansi.py
        ansitowin32.py
       initialise.py
        win32.py
       winterm.py
        __init__.py
    +---tests
          ansitowin32 test.py
           ansi_test.py
           initialise test.py
           isatty_test.py
           utils.py
           winterm_test.py
          __init__.py
        \---__pycache__
                ansitowin32_test.cpython-311.pyc
                ansi test.cpython-311.pyc
               initialise_test.cpython-311.pyc
                isatty test.cpython-311.pyc
               utils.cpython-311.pyc
                winterm test.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            ansi.cpython-311.pyc
            ansitowin32.cpython-311.pyc
            initialise.cpython-311.pyc
            win32.cpython-311.pyc
            winterm.cpython-311.pyc
            __init__.cpython-311.pyc
+---colorama-0.4.6.dist-info
        INSTALLER
        METADATA
        RECORD
        WHEEL
    \---licenses
            LICENSE.txt
+---contourpy
       array.py
       chunk.py
        convert.py
dechunk.py
        enum_util.py
1 1
       py.typed
```

```
typecheck.py
        types.py
        _contourpy.cp311-win_amd64.lib
        _contourpy.cp311-win_amd64.pyd
        _contourpy.pyi
        version.py
        __init__.py
    +---util
           bokeh_renderer.py
       bokeh_util.py
           data.py
           mpl renderer.py
           mpl_util.py
            renderer.py
            _build_config.py
            __init__.py
        \---_pycache__
                bokeh_renderer.cpython-311.pyc
                bokeh_util.cpython-311.pyc
                data.cpython-311.pyc
                mpl renderer.cpython-311.pyc
                mpl_util.cpython-311.pyc
                renderer.cpython-311.pyc
                _build_config.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            array.cpython-311.pyc
            chunk.cpython-311.pyc
            convert.cpython-311.pyc
            dechunk.cpython-311.pyc
            enum_util.cpython-311.pyc
            typecheck.cpython-311.pyc
            types.cpython-311.pyc
            _version.cpython-311.pyc
            __init__.cpython-311.pyc
+---contourpy-1.3.1.dist-info
        INSTALLER
        LICENSE
        METADATA
        RECORD
        WHEEL
+---cpuinfo
        cpuinfo.py
        __init__.py
        __main__.py
```

```
| \---__pycache__
                    cpuinfo.cpython-311.pyc
                     __init__.cpython-311.pyc
                     __main__.cpython-311.pyc
| | config-3.py
          | | config.py
                cv2.pyd
                 LICENSE-3RD-PARTY.txt
                 LICENSE.txt
          load_config_py2.py
          1 1
                load_config_py3.py
             | opencv_videoio_ffmpeg4110_64.dll
          py.typed
          | | version.py
                __init__.py
                  __init__.pyi
          | +---aruco
                   __init__.pyi
          | |
            +---barcode
                   __init__.pyi
          | +---cuda
                  __init__.pyi
          | +---data
          | | haarcascade eye.xml
                | haarcascade_eye_tree_eyeglasses.xml
                     haarcascade_frontalcatface.xml
              haarcascade_frontalcatface_extended.xml
                     haarcascade_frontalface_alt.xml
                     haarcascade_frontalface_alt2.xml
                     haarcascade_frontalface_alt_tree.xml
                     haarcascade_frontalface_default.xml
                     haarcascade fullbody.xml
                     haarcascade_lefteye_2splits.xml
                     haarcascade license plate rus 16stages.xml
                     haarcascade_lowerbody.xml
             haarcascade_profileface.xml
                     haarcascade_righteye_2splits.xml
                     haarcascade_russian_plate_number.xml
                     haarcascade smile.xml
                     haarcascade_upperbody.xml
Ī
          1 1
                     __init__.py
          \---__pycache__
                       __init__.cpython-311.pyc
```

```
| | +---detail
  | | __init__.pyi
1 1
1 1
  | +---dnn
  | | __init__.pyi
1 1
  1 1
| |
  | +---Error
  | | __init__.pyi
  1 1
| +---fisheye
1 1
  | | __init__.pyi
1 1
| |
  | +---flann
1 1
  | | __init__.pyi
1 1
  1 1
| +---gapi
  1 1
  1 1
  | | +---core
  1 1
  | | +---cpu
  | | +---fluid
  1 1
  | | \---ocl
  1 1
  | | +---ie
1 1
  1 1
 1 1
| | +---imgproc
  1 1
  | | \---fluid
  1 1 1
  | | +---oak
  1 1
1 1
  | | +---onnx
  | | \---ep
```

```
| | +---ot
  | | \---cpu
  1 1
  | | +---ov
 | +---own
 | | +---render
  | | \---ocv
  | | +---streaming
  | | | __init__.pyi
1 1
  | | +---wip
  | | +---draw
  1 1
  | | +---gst
  | \---__pycache__
  | | __init__.cpython-311.pyc
| |
  1 1
  | +---ipp
  1 1
  1 1
1 1
1 1
  | +---mat_wrapper
  1 1
__init__.cpython-311.pyc
```

```
1 1 1
    | +---misc
    | | version.py
    1 1
1 1 1
I = I
    1 1
          version.cpython-311.pyc
           __init__.cpython-311.pyc
    | |
1 1
    | +---ml
    | | __init__.pyi
    1 1
    | +---ocl
I I
    1
 1 1
    | +---ogl
| | __init__.pyi
1 1
    1 1
 | +---parallel
    | | __init__.pyi
1 1
1 1
    | +---samples
    | |
| +---segmentation
    | | __init__.pyi
 - 1
    1 1
1 1
    | +---typing
    | __init__.cpython-311.pyc
 1 1
    | +---utils
    | | +---fs
    | | +---nested
1 1
    1 1 1
    __init__.cpython-311.pyc
1
 1 1
1 1
    1 1
    | +---videoio_registry
    1 1
1
 - 1
    | \---__pycache__
1 1
1 1
    1
         config-3.cpython-311.pyc
```

```
config.cpython-311.pyc
                    load_config_py2.cpython-311.pyc
                     load_config_py3.cpython-311.pyc
                     version.cpython-311.pyc
                     __init__.cpython-311.pyc
          +---cycler
          | | py.typed
          \---_pycache__
                     __init__.cpython-311.pyc
          1
          +---cycler-0.12.1.dist-info
                 INSTALLER
                 LICENSE
                 METADATA
                 RECORD
                 top_level.txt
                 WHEEL
          +---dateutil
                 easter.py
          | relativedelta.py
                rrule.py
                tzwin.py
                utils.py
                common.py
                 _version.py
                 __init__.py
             +---parser
          | | isoparser.py
                    _parser.py
                | __init__.py
                \---__pycache__
                        isoparser.cpython-311.pyc
                        _parser.cpython-311.pyc
                        __init__.cpython-311.pyc
          | +---tz
          | | tz.py
                | win.py
                    _common.py
                | _factories.py
I
                     __init__.py
          1 1 1
          | \---_pycache__
                       tz.cpython-311.pyc
          1 1
                        win.cpython-311.pyc
```

```
_common.cpython-311.pyc
                _factories.cpython-311.pyc
                __init__.cpython-311.pyc
 | +---zoneinfo
       | dateutil-zoneinfo.tar.gz
            rebuild.py
            __init__.py
        \---_pycache_
                rebuild.cpython-311.pyc
                __init__.cpython-311.pyc
     \---_pycache__
            easter.cpython-311.pyc
             relativedelta.cpython-311.pyc
            rrule.cpython-311.pyc
            tzwin.cpython-311.pyc
            utils.cpython-311.pyc
            _common.cpython-311.pyc
            version.cpython-311.pyc
             __init__.cpython-311.pyc
 +---distro
 | | distro.py
     | py.typed
         __init__.py
         __main__.py
     \---_pycache__
            distro.cpython-311.pyc
             __init__.cpython-311.pyc
             __main__.cpython-311.pyc
 +---distro-1.9.0.dist-info
         entry_points.txt
         INSTALLER
         LICENSE
         METADATA
         RECORD
         top_level.txt
         WHEEL
 +---dotenv
 cli.py
        ipython.py
        main.py
 parser.py
 py.typed
         variables.py
version.py
```

```
__main__.py
              \---_pycache__
                     cli.cpython-311.pyc
                     ipython.cpython-311.pyc
                     main.cpython-311.pyc
                     parser.cpython-311.pyc
                     variables.cpython-311.pyc
                     version.cpython-311.pyc
                     __init__.cpython-311.pyc
                     __main__.cpython-311.pyc
          +---fastapi
                  applications.py
                  background.py
                  cli.py
                  concurrency.py
                  datastructures.py
                  encoders.py
          exceptions.py
                  exception_handlers.py
          logger.py
          params.py
                  param functions.py
                  py.typed
                  requests.py
                  responses.py
                  routing.py
                  staticfiles.py
          1
                  templating.py
                  testclient.py
          types.py
                  utils.py
                  websockets.py
                  compat.py
                  __init__.py
                  __main__.py
              +---dependencies
                  | models.py
                     utils.py
                     __init__.py
                  \---_pycache__
                         models.cpython-311.pyc
Ī
                         utils.cpython-311.pyc
                         __init__.cpython-311.pyc
          | +---middleware
```

```
gzip.py
       httpsredirect.py
       trustedhost.py
        wsgi.py
        __init__.py
    \---_pycache__
            cors.cpython-311.pyc
            gzip.cpython-311.pyc
            https://direct.cpython-311.pyc
            trustedhost.cpython-311.pyc
            wsgi.cpython-311.pyc
            __init__.cpython-311.pyc
+---openapi
  constants.py
       docs.py
        models.py
        utils.py
        __init__.py
    \---__pycache__
            constants.cpython-311.pyc
            docs.cpython-311.pyc
            models.cpython-311.pyc
           utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---security
       api key.py
       base.py
        http.py
        oauth2.py
        open_id_connect_url.py
       utils.py
        __init__.py
    \---_pycache__
            api_key.cpython-311.pyc
            base.cpython-311.pyc
           http.cpython-311.pyc
            oauth2.cpython-311.pyc
            open_id_connect_url.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        applications.cpython-311.pyc
        background.cpython-311.pyc
        cli.cpython-311.pyc
        concurrency.cpython-311.pyc
```

```
datastructures.cpython-311.pyc
            encoders.cpython-311.pyc
            exceptions.cpython-311.pyc
            exception handlers.cpython-311.pyc
            logger.cpython-311.pyc
            params.cpython-311.pyc
            param_functions.cpython-311.pyc
            requests.cpython-311.pyc
            responses.cpython-311.pyc
            routing.cpython-311.pyc
            staticfiles.cpython-311.pyc
            templating.cpython-311.pyc
            testclient.cpython-311.pyc
            types.cpython-311.pyc
            utils.cpython-311.pyc
            websockets.cpython-311.pyc
            _compat.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---fastapi-0.115.11.dist-info
        entry_points.txt
        INSTALLER
        METADATA
        RECORD
        REQUESTED
        WHEEL
    \---licenses
           LICENSE
+---filelock
        py.typed
        version.py
        _api.py
        error.py
        _soft.py
        unix.py
        _util.py
        windows.py
        __init__.py
    \---_pycache_
           version.cpython-311.pyc
            api.cpython-311.pyc
            _error.cpython-311.pyc
            _soft.cpython-311.pyc
            _unix.cpython-311.pyc
            util.cpython-311.pyc
            _windows.cpython-311.pyc
            __init__.cpython-311.pyc
```

```
+---filelock-3.13.1.dist-info
1 1
      INSTALLER
      METADATA
1 1
      RECORD
       WHEEL
   \---licenses
          LICENSE
+---fontTools
| | afmLib.py
      agl.py
      fontBuilder.py
      help.py
   | tfmLib.py
      ttx.py
      unicode.py
       __init__.py
       __main__.py
+---cffLib
      | CFF2ToCFF.py
   | CFFToCFF2.py
          specializer.py
          transforms.py
          width.py
          __init__.py
      \---_pycache__
              CFF2ToCFF.cpython-311.pyc
              CFFToCFF2.cpython-311.pyc
              specializer.cpython-311.pyc
              transforms.cpython-311.pyc
              width.cpython-311.pyc
              __init__.cpython-311.pyc
   +---colorLib
  | | builder.py
      | errors.py
      | geometry.py
          table_builder.py
         unbuilder.py
           __init__.py
      \---__pycache__
              builder.cpython-311.pyc
              errors.cpython-311.pyc
geometry.cpython-311.pyc
              table_builder.cpython-311.pyc
unbuilder.cpython-311.pyc
```

```
__init__.cpython-311.pyc
        | +---config
         1 1 1
               \---_pycache__
                     __init__.cpython-311.pyc
           +---cu2qu
         | | benchmark.py
               | cli.py
               | cu2qu.c
               | cu2qu.cp311-win amd64.pyd
               | cu2qu.py
                  errors.py
               | ufo.py
               | __init__.py
Ī
                    __main__.py
               \---__pycache__
                       benchmark.cpython-311.pyc
                       cli.cpython-311.pyc
                       cu2qu.cpython-311.pyc
                       errors.cpython-311.pyc
                       ufo.cpython-311.pyc
                       __init__.cpython-311.pyc
                       __main__.cpython-311.pyc
            +---designspaceLib
         1
            - 1
               | split.py
               | statNames.py
               | types.py
               | __init__.py
                   __main__.py
               \---_pycache__
                       split.cpython-311.pyc
                       statNames.cpython-311.pyc
                       types.cpython-311.pyc
                       init .cpython-311.pyc
                       __main__.cpython-311.pyc
         | +---encodings
               | codecs.py
                | MacRoman.py
               | StandardEncoding.py
Ī
         __init__.py
         1 1 1
         \---__pycache__
                      codecs.cpython-311.pyc
         | |
                       MacRoman.cpython-311.pyc
```

```
StandardEncoding.cpython-311.pyc
            __init__.cpython-311.pyc
+---feaLib
1 1
        ast.py
        builder.py
        error.py
        lexer.c
        lexer.cp311-win_amd64.pyd
        lexer.py
        location.py
        lookupDebugInfo.py
        parser.py
        variableScalar.py
        __init__.py
        __main__.py
    \---__pycache__
            ast.cpython-311.pyc
            builder.cpython-311.pyc
            error.cpython-311.pyc
            lexer.cpython-311.pyc
            location.cpython-311.pyc
            lookupDebugInfo.cpython-311.pyc
            parser.cpython-311.pyc
            variableScalar.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---merge
        base.py
        cmap.py
        layout.py
        options.py
        tables.py
        unicode.py
        util.py
        __init__.py
        __main__.py
    \---__pycache__
            base.cpython-311.pyc
            cmap.cpython-311.pyc
            layout.cpython-311.pyc
            options.cpython-311.pyc
            tables.cpython-311.pyc
            unicode.cpython-311.pyc
            util.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
```

```
| +---misc
              1 1
                       arrayTools.py
                  bezierTools.c
                       bezierTools.cp311-win amd64.pyd
                       bezierTools.py
                       classifyTools.py
                       cliTools.py
                       configTools.py
                       cython.py
                       dictTools.py
                       eexec.py
                       encodingTools.py
                       etree.py
                       filenames.py
                       fixedTools.py
                       intTools.py
                       iterTools.py
ı
                       lazyTools.py
                       loggingTools.py
                       macCreatorType.py
                       macRes.py
                       psCharStrings.py
                       psLib.py
                       psOperators.py
                       ру23.ру
                       roundTools.py
                       sstruct.py
                       symfont.py
                       testTools.py
                       textTools.py
                       timeTools.py
                       transform.py
                       treeTools.py
                       vector.py
                       visitor.py
                       xmlReader.py
                       xmlWriter.py
                       __init__.py
                  +---plistlib
                   | | py.typed
                          __init__.py
                  - 1
                     \---__pycache__
                               __init__.cpython-311.pyc
           Ī
                   \---_pycache__
                           arrayTools.cpython-311.pyc
           bezierTools.cpython-311.pyc
                           classifyTools.cpython-311.pyc
                           cliTools.cpython-311.pyc
```

```
configTools.cpython-311.pyc
           cython.cpython-311.pyc
           dictTools.cpython-311.pyc
            eexec.cpython-311.pyc
            encodingTools.cpython-311.pyc
            etree.cpython-311.pyc
            filenames.cpython-311.pyc
            fixedTools.cpython-311.pyc
            intTools.cpython-311.pyc
            iterTools.cpython-311.pyc
            lazyTools.cpython-311.pyc
            loggingTools.cpython-311.pyc
           macCreatorType.cpython-311.pyc
            macRes.cpython-311.pyc
           psCharStrings.cpython-311.pyc
            psLib.cpython-311.pyc
           psOperators.cpython-311.pyc
            py23.cpython-311.pyc
            roundTools.cpython-311.pyc
            sstruct.cpython-311.pyc
            symfont.cpython-311.pyc
            testTools.cpython-311.pyc
            textTools.cpython-311.pyc
            timeTools.cpython-311.pyc
            transform.cpython-311.pyc
            treeTools.cpython-311.pyc
            vector.cpython-311.pyc
            visitor.cpython-311.pyc
            xmlReader.cpython-311.pyc
            xmlWriter.cpython-311.pyc
            __init__.cpython-311.pyc
+---mtiLib
       __init__.py
       __main__.py
   \---__pycache__
           __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---otlLib
       builder.py
       error.py
       maxContextCalc.py
        __init__.py
    +---optimize
  | | gpos.py
           __init__.py
   __main__.py
```

```
\---_pycache_
               gpos.cpython-311.pyc
               __init__.cpython-311.pyc
                __main__.cpython-311.pyc
   \---__pycache__
           builder.cpython-311.pyc
           error.cpython-311.pyc
           maxContextCalc.cpython-311.pyc
           __init__.cpython-311.pyc
+---pens
       areaPen.py
       basePen.py
       boundsPen.py
       cairoPen.py
       cocoaPen.py
       cu2quPen.py
       explicitClosingLinePen.py
       filterPen.py
        freetypePen.py
       hashPointPen.py
       momentsPen.c
       momentsPen.cp311-win_amd64.pyd
       momentsPen.py
       perimeterPen.py
       pointInsidePen.py
       pointPen.py
       qtPen.py
       qu2cuPen.py
       quartzPen.py
        recordingPen.py
       reportLabPen.py
        reverseContourPen.py
       roundingPen.py
       statisticsPen.py
       svgPathPen.py
       t2CharStringPen.py
       teePen.py
       transformPen.py
       ttGlyphPen.py
       wxPen.py
       __init__.py
   \--- pycache
           areaPen.cpython-311.pyc
           basePen.cpython-311.pyc
           boundsPen.cpython-311.pyc
           cairoPen.cpython-311.pyc
           cocoaPen.cpython-311.pyc
           cu2quPen.cpython-311.pyc
```

```
explicitClosingLinePen.cpython-311.pyc
            filterPen.cpython-311.pyc
            freetypePen.cpython-311.pyc
            hashPointPen.cpython-311.pyc
           momentsPen.cpython-311.pyc
           perimeterPen.cpython-311.pyc
            pointInsidePen.cpython-311.pyc
            pointPen.cpython-311.pyc
            qtPen.cpython-311.pyc
            qu2cuPen.cpython-311.pyc
            quartzPen.cpython-311.pyc
            recordingPen.cpython-311.pyc
            reportLabPen.cpython-311.pyc
            reverseContourPen.cpython-311.pyc
            roundingPen.cpython-311.pyc
            statisticsPen.cpython-311.pyc
            svgPathPen.cpython-311.pyc
            t2CharStringPen.cpython-311.pyc
            teePen.cpython-311.pyc
            transformPen.cpython-311.pyc
            ttGlyphPen.cpython-311.pyc
           wxPen.cpython-311.pyc
            init .cpython-311.pyc
+---qu2cu
       benchmark.py
       cli.py
       qu2cu.c
        qu2cu.cp311-win_amd64.pyd
        qu2cu.py
        __init__.py
        __main__.py
   \---_pycache_
           benchmark.cpython-311.pyc
           cli.cpython-311.pyc
           qu2cu.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---subset
       cff.py
       svg.py
       util.py
        __init__.py
        __main__.py
   \---__pycache__
           cff.cpython-311.pyc
           svg.cpython-311.pyc
           util.cpython-311.pyc
```

```
__init__.cpython-311.pyc
               __main__.cpython-311.pyc
      | +---svgLib
1
      | | +---path
      | | parser.py
        | | | shapes.py
      1
         1 1
      arc.cpython-311.pyc
                parser.cpython-311.pyc
                shapes.cpython-311.pyc
                 __init__.cpython-311.pyc
I
      1 1 1
      | \---__pycache__
__init__.cpython-311.pyc
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     | +---t1Lib
1 1 1
Τ
      | | \---_pycache__
             __init__.cpython-311.pyc
      | +---ttLib
ı
     | | macUtils.py
      | | removeOverlaps.py
      | | reorderGlyphs.py
      | | scaleUpem.py
      | | sfnt.py
          | standardGlyphOrder.py
      | | ttCollection.py
      | | ttFont.py
| | ttGlyphSet.py
      | | ttVisitor.py
1
      | | woff2.py
      1
      1
      | | | asciiTable.py
          | | BitmapGlyphMetrics.py
Τ
      | | | B_A_S_E_.py
1
       | | C_B_D_T_.py
      I
      | | | C_O_L_R_.py
```

```
C_P_A_L_.py
                            DefaultTable.py
                            D_S_I_G_.py
                            D__e_b_g.py
                            E_B_D_T_.py
                            E_B_L_C_.py
                            F_F_T_M_.py
                            F__e_a_t.py
                            grUtils.py
                            G_D_E_F_.py
                            G_M_A_P_.py
                            G_P_K_G_.py
                            G_P_O_S_.py
                            G_S_U_B_.py
                            G__l_a_t.py
                            G__l_o_c.py
                            H_V_A_R_.py
Ī
                            J_S_T_F_.py
                            L_T_S_H_.py
                            M_A_T_H_.py
                            M_E_T_A_.py
                            M_V_A_R_.py
                            otBase.py
                            otConverters.py
                            otData.py
                            otTables.py
                            otTraverse.py
                            O_S_2f_2.py
                            sbixGlyph.py
                            sbixStrike.py
                            S_I_N_G_.py
                            S_T_A_T_.py
                            S_V_G_.py
                            S__i_l_f.py
                            S__i_l_l.py
                            table_API_readme.txt
                            ttProgram.py
                            TupleVariation.py
                            T_S_I_B_.py
                            T_S_I_C_.py
                            T_S_I_D_.py
                            T_S_I_J_.py
                            T_S_I_P_.py
                            T_S_I_S_.py
                            T_S_I_V_.py
                            T_S_I__0.py
Ī
                            T_S_I__1.py
                            T_S_I__2.py
                        T_S_I__3.py
                            T_S_I__5.py
```

T\_T\_F\_A\_.py

```
V_A_R_C_.py
                            V_D_M_X_.py
                            V_O_R_G_.py
                            V_V_A_R_.py
                            _a_n_k_r.py
Ī
                            _a_v_a_r.py
                            _b_s_l_n.py
                            _c_i_d_g.py
                            _c_m_a_p.py
                            _c_v_a_r.py
                            _c_v_t.py
                            _f_e_a_t.py
ī
                            _f_p_g_m.py
                            _f_v_a_r.py
                            _g_a_s_p.py
                            _g_c_i_d.py
                            _g_l_y_f.py
Ī
                            _g_v_a_r.py
                    1
                            _h_d_m_x.py
                            _h_e_a_d.py
                            _h_h_e_a.py
                            _h_m_t_x.py
                            _k_e_r_n.py
                            _1_c_a_r.py
                            _l_o_c_a.py
                            _l_t_a_g.py
                            _m_a_x_p.py
Ī
                            _m_e_t_a.py
                            _m_o_r_t.py
                    _m_o_r_x.py
                            _n_a_m_e.py
ı
                            _o_p_b_d.py
                            _p_o_s_t.py
                            _p_r_e_p.py
                            _p_r_o_p.py
                            _s_b_i_x.py
1
                            _t_r_a_k.py
                            _v_h_e_a.py
                            _v_m_t_x.py
                            init .py
                       -
                       \---_pycache_
                                asciiTable.cpython-311.pyc
                                BitmapGlyphMetrics.cpython-311.pyc
                                B_A_S_E_.cpython-311.pyc
                                C_B_D_T_.cpython-311.pyc
Ī
                                C_B_L_C_.cpython-311.pyc
                                C_F_F_.cpython-311.pyc
                                C_F_F__2.cpython-311.pyc
                                C_O_L_R_.cpython-311.pyc
                                C_P_A_L_.cpython-311.pyc
```

ı	ı	1	ı	ı	DefaultTable.cpython-311.pyc
i	i	·	i	i	D S I G .cpython-311.pyc
i	i	·	i	·	D e b g.cpython-311.pyc
i	i	·	i	i	E B D T .cpython-311.pyc
i	i	·	i	i	E_B_L_Ccpython-311.pyc
i	i	·	i	i	F F T M .cpython-311.pyc
Ī	ı	i	ı	ı	F e a t.cpython-311.pyc
i	i	·	i	i	grUtils.cpython-311.pyc
i	i	·	i	i	G D E F .cpython-311.pyc
i	i	·	i	i	G M A P .cpython-311.pyc
i	i	·	i	i	G_P_K_Gcpython-311.pyc
Ī	ı	i	ı	ı	G P O S .cpython-311.pyc
ı	ı	·	ı	ı	G S U B .cpython-311.pyc
Ī	ı	i	ı	ı	G l a t.cpython-311.pyc
ı	ı	·	ı	ı	G l o c.cpython-311.pyc
i	i	·	i	i	H V A R .cpython-311.pyc
i	i	·	i	i	J S T F .cpython-311.pyc
i	i	·	i	·	L T S H .cpython-311.pyc
i	i	·	i	i	M A T H .cpython-311.pyc
i	i	·	i	·	M E T A .cpython-311.pyc
i	i	·	i	·	M V A R .cpython-311.pyc
i	i	·	i	·	otBase.cpython-311.pyc
i	i	·	i	i	otConverters.cpython-311.pyc
i	i	·	i	i	otData.cpython-311.pyc
i	i	·	i	i	otTables.cpython-311.pyc
i	i	·	i	i	otTraverse.cpython-311.pyc
i	i	·	i	i	O S 2f 2.cpython-311.pyc
i	i	·	i	i	sbixGlyph.cpython-311.pyc
i	i	·	i	i	sbixStrike.cpython-311.pyc
i	i	·	i	i	S I N G .cpython-311.pyc
i	i	·	i	i	S T A T .cpython-311.pyc
i	i	·	i	i	S_V_Gcpython-311.pyc
i	i	·	i	i	S i 1 f.cpython-311.pyc
Ī	ı	i	ı	ı	S i 1 1.cpython-311.pyc
·	i	· I	I	ı	ttProgram.cpython-311.pyc
i	i	·	i	i	TupleVariation.cpython-311.pyc
·	ı	· I	I	ı	T S I B .cpython-311.pyc
ı	ı	·	ı	ı	T S I C .cpython-311.pyc
·	i	· I	I	ı	T_S_I_Dcpython-311.pyc
i	i	·	i	i	T S I J .cpython-311.pyc
i	i	·	i	i	T_S_I_Pcpython-311.pyc
i	i	·	ı	i	T_S_I_Scpython-311.pyc
Ī	ı	i	ı	ı	T S I V .cpython-311.pyc
i	i	·	i	i	T_S_I0.cpython-311.pyc
·	ı	· I	·	Í	T_S_I1.cpython-311.pyc
·	i	· I	ı		T_S_I2.cpython-311.pyc
·	i	· I	I	í	T S I 3.cpython-311.pyc
·	i	· I	I	ı	T S I 5.cpython-311.pyc
·	i	· I	·	ï	T T F A .cpython-311.pyc
·	i	· I	·	·	V_A_R_Ccpython-311.pyc
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		'			

1	1	1	1	I	V_O_R_Gcpython-311.pyc
1	1	1	1	I	V_V_A_Rcpython-311.pyc
1	1	1	1	I	_a_n_k_r.cpython-311.pyc
I	I	I	1	I	_a_v_a_r.cpython-311.pyc
I	I	I	1	I	_b_s_l_n.cpython-311.pyc
1	I	1	1	1	_c_i_d_g.cpython-311.pyc
1	1	1	1	I	_c_m_a_p.cpython-311.pyc
1	I	1	1	I	_c_v_a_r.cpython-311.pyc
1	I	1	1	I	_c_v_t.cpython-311.pyc
1	1	I	I	I	_f_e_a_t.cpython-311.pyc
1	1	I	I	I	_f_p_g_m.cpython-311.pyc
1	I	I	1	I	_f_v_a_r.cpython-311.pyc
1	I	I	1	I	_g_a_s_p.cpython-311.pyc
ı	I	I	I	I	_g_c_i_d.cpython-311.pyc
1	I	I	ı	I	_g_l_y_f.cpython-311.pyc
ı	ı	I	ı	I	_g_v_a_r.cpython-311.pyc
ı	ı	I	ı	I	h d m x.cpython-311.pyc
i	ı	1	ı	ı	_h_e_a_d.cpython-311.pyc
i	i	·	i	i	_h_h_e_a.cpython-311.pyc
i	i	·	i	i	_h_m_t_x.cpython-311.pyc
·	i		i	·	_k_e_r_n.cpython-311.pyc
	i	, I	i	i I	_l_c_a_r.cpython-311.pyc
	i	'	İ		_l_o_c_a.cpython-311.pyc
	' 	1	' 	1	l t a g.cpython-311.pyc
		1	' 	1	m a x p.cpython-311.pyc
	' 	1	' 	1	_m_e_t_a.cpython-311.pyc
'		1		1	_m_o_r_t.cpython-311.pyc
i	' 	' 	' 	1	_m_o_r_x.cpython-311.pyc
i		1		1	_n_a_m_e.cpython-311.pyc
		'		1	_o_p_b_d.cpython-311.pyc
		1	1		_o_p_b_d.cpython-311.pyc
		ı			
		ı		1	_p_r_e_p.cpython-311.pyc
		1		1	_p_r_o_p.cpython-311.pyc
					_s_b_i_x.cpython-311.pyc
					_t_r_a_k.cpython-311.pyc
		l	1	1	_v_h_e_a.cpython-311.pyc
			1	1	_v_m_t_x.cpython-311.pyc
I	I	I	I	I	initcpython-311.pyc
I	I	l	I	I	
I	I	I	I	/py	
I		I	I		macUtils.cpython-311.pyc
I		I	I		removeOverlaps.cpython-311.pyc
I		I	I		reorderGlyphs.cpython-311.pyc
I		I	I		scaleUpem.cpython-311.pyc
I	I	I	I		sfnt.cpython-311.pyc
I	I	I	I		standardGlyphOrder.cpython-311.pyc
I	I	I	I		ttCollection.cpython-311.pyc
I	I	T	I		ttFont.cpython-311.pyc
I	I	1	T		ttGlyphSet.cpython-311.pyc
I	I	1	T		ttVisitor.cpython-311.pyc
1		1	1		woff2.cpython-311.pyc

```
__init__.cpython-311.pyc
               __main__.cpython-311.pyc
   +---ufoLib
| | converters.py
           errors.py
           etree.py
           filenames.py
           glifLib.py
           kerning.py
           plistlib.py
           pointPen.py
           utils.py
           validators.py
           init .py
       \---__pycache__
               converters.cpython-311.pyc
               errors.cpython-311.pyc
               etree.cpython-311.pyc
               filenames.cpython-311.pyc
               glifLib.cpython-311.pyc
               kerning.cpython-311.pyc
               plistlib.cpython-311.pyc
               pointPen.cpython-311.pyc
               utils.cpython-311.pyc
               validators.cpython-311.pyc
               __init__.cpython-311.pyc
    +---unicodedata
          Blocks.py
           OTTags.py
           ScriptExtensions.py
           Scripts.py
           __init__.py
      \---__pycache__
               Blocks.cpython-311.pyc
               OTTags.cpython-311.pyc
               ScriptExtensions.cpython-311.pyc
               Scripts.cpython-311.pyc
               __init__.cpython-311.pyc
   +---varLib
      - 1
           avar.py
           avarPlanner.py
           builder.py
           cff.py
      errors.py
           featureVars.py
           interpolatable.py
```

```
interpolatableHelpers.py
    interpolatablePlot.py
    interpolatableTestContourOrder.py
    interpolatableTestStartingPoint.py
    interpolate_layout.py
    iup.c
    iup.cp311-win_amd64.pyd
    iup.py
   merger.py
    models.py
    multiVarStore.py
   mutator.py
   mvar.py
    plot.py
    stat.py
    varStore.py
    __init__.py
    __main__.py
+---instancer
        featureVars.py
        names.py
        solver.py
        __init__.py
        main .py
   \---__pycache__
            featureVars.cpython-311.pyc
            names.cpython-311.pyc
            solver.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
\---_pycache__
        avar.cpython-311.pyc
        avarPlanner.cpython-311.pyc
        builder.cpython-311.pyc
        cff.cpython-311.pyc
        errors.cpython-311.pyc
        featureVars.cpython-311.pyc
        interpolatable.cpython-311.pyc
        interpolatableHelpers.cpython-311.pyc
        interpolatablePlot.cpython-311.pyc
        interpolatableTestContourOrder.cpython-311.pyc
        interpolatableTestStartingPoint.cpython-311.pyc
        interpolate_layout.cpython-311.pyc
        iup.cpython-311.pyc
        merger.cpython-311.pyc
        models.cpython-311.pyc
        multiVarStore.cpython-311.pyc
        mutator.cpython-311.pyc
```

```
mvar.cpython-311.pyc
               plot.cpython-311.pyc
               stat.cpython-311.pyc
               varStore.cpython-311.pyc
                __init__.cpython-311.pyc
                main .cpython-311.pyc
    +---voltLib
       ast.py
            error.py
           lexer.py
           parser.py
           voltToFea.py
            \_init\_.py
       \---_pycache__
               ast.cpython-311.pyc
               error.cpython-311.pyc
               lexer.cpython-311.pyc
               parser.cpython-311.pyc
               voltToFea.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            afmLib.cpython-311.pyc
            agl.cpython-311.pyc
            fontBuilder.cpython-311.pyc
           help.cpython-311.pyc
            tfmLib.cpython-311.pyc
           ttx.cpython-311.pyc
           unicode.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---fonttools-4.56.0.dist-info
       entry_points.txt
       INSTALLER
       LICENSE
       METADATA
       RECORD
       top_level.txt
       WHEEL
+---fpdf
       fonts.py
       fpdf.py
       html.py
       php.py
py3k.py
       template.py
        ttfonts.py
```

```
__init__.py
           \---_pycache__
                       fonts.cpython-311.pyc
                       fpdf.cpython-311.pyc
                       html.cpython-311.pyc
                       php.cpython-311.pyc
                       py3k.cpython-311.pyc
                       template.cpython-311.pyc
                       ttfonts.cpython-311.pyc
                       __init__.cpython-311.pyc
           +---fpdf-1.7.2.dist-info
                   INSTALLER
                   METADATA
                   RECORD
                   REQUESTED
                   top_level.txt
                   WHEEL
           +---fsspec
                   archive.py
           asyn.py
                   caching.py
                   callbacks.py
                   compression.py
                   config.py
                   conftest.py
                   core.py
                   dircache.py
           1
                   exceptions.py
           1
                   fuse.py
                   generic.py
           gui.py
           json.py
                   mapping.py
                   parquet.py
           registry.py
                   spec.py
                   transaction.py
                   utils.py
                   _version.py
                   __init__.py
               +---implementations
                       arrow.py
ı
                       cached.py
                       cache_mapper.py
                   -
                       cache_metadata.py
                       dask.py
                       data.py
```

```
dbfs.py
       dirfs.py
       ftp.py
       git.py
       github.py
       http.py
       jupyter.py
       libarchive.py
       local.py
       memory.py
       reference.py
       sftp.py
       smb.py
        tar.py
       webhdfs.py
       zip.py
        __init__.py
   \---_pycache__
           arrow.cpython-311.pyc
            cached.cpython-311.pyc
           cache_mapper.cpython-311.pyc
            cache metadata.cpython-311.pyc
           dask.cpython-311.pyc
            data.cpython-311.pyc
           dbfs.cpython-311.pyc
           dirfs.cpython-311.pyc
            ftp.cpython-311.pyc
           git.cpython-311.pyc
           github.cpython-311.pyc
           http.cpython-311.pyc
            jupyter.cpython-311.pyc
           libarchive.cpython-311.pyc
            local.cpython-311.pyc
           memory.cpython-311.pyc
            reference.cpython-311.pyc
            sftp.cpython-311.pyc
            smb.cpython-311.pyc
            tar.cpython-311.pyc
            webhdfs.cpython-311.pyc
            zip.cpython-311.pyc
            __init__.cpython-311.pyc
+---tests
   \---abstract
           common.py
        |
           сору.ру
           get.py
           mv.py
           put.py
           __init__.py
```

```
\---_pycache_
                   common.cpython-311.pyc
                   copy.cpython-311.pyc
                   get.cpython-311.pyc
                   mv.cpython-311.pyc
                   put.cpython-311.pyc
                   init .cpython-311.pyc
   \---_pycache_
           archive.cpython-311.pyc
           asyn.cpython-311.pyc
           caching.cpython-311.pyc
           callbacks.cpython-311.pyc
           compression.cpython-311.pyc
           config.cpython-311.pyc
           conftest.cpython-311.pyc
           core.cpython-311.pyc
           dircache.cpython-311.pyc
           exceptions.cpython-311.pyc
           fuse.cpython-311.pyc
           generic.cpython-311.pyc
           gui.cpython-311.pyc
           json.cpython-311.pyc
           mapping.cpython-311.pyc
           parquet.cpython-311.pyc
           registry.cpython-311.pyc
           spec.cpython-311.pyc
           transaction.cpython-311.pyc
           utils.cpython-311.pyc
           _version.cpython-311.pyc
            __init__.cpython-311.pyc
+---fsspec-2024.6.1.dist-info
       INSTALLER
       METADATA
       RECORD
       WHEEL
   \---licenses
           LICENSE
+---functorch
      _C.cp311-win_amd64.pyd
       __init__.py
   +---compile
  - 1
      \---__pycache__
               __init__.cpython-311.pyc
```

```
| +---dim
       | | batch_tensor.py
             | delayed mul tensor.py
       | | dim.py
                magic trace.py
                op_properties.py
                 reference.py
                tree_map.py
                 wrap_type.py
                 __init__.py
             \--- pycache
                    batch_tensor.cpython-311.pyc
                    delayed mul tensor.cpython-311.pyc
                    dim.cpython-311.pyc
                    magic_trace.cpython-311.pyc
                    op_properties.cpython-311.pyc
                    reference.cpython-311.pyc
                    tree_map.cpython-311.pyc
                    wrap type.cpython-311.pyc
                    __init__.cpython-311.pyc
       | +---einops
         | | rearrange.py
                 _parsing.py
                __init__.py
             \---_pycache__
                    rearrange.cpython-311.pyc
                    _parsing.cpython-311.pyc
                    __init__.cpython-311.pyc
       | +---experimental
       | | control_flow.py
             | ops.py
             | __init__.py
             \---_pycache__
                    control flow.cpython-311.pyc
                    ops.cpython-311.pyc
                    __init__.cpython-311.pyc
          +---_src
       1 1 1
         | +---aot_autograd
       __init__.cpython-311.pyc
```

```
1 1 1
1
 - 1
       | | +---eager_transforms
        1
Ī
                       __init__.cpython-311.pyc
             +---make functional
          1 1
             | \---__pycache__
                     __init__.cpython-311.pyc
           | +---vmap
             1
             1 1
              | \---__pycache__
Ī
                       __init__.cpython-311.pyc
| \---__pycache__
                     __init__.cpython-311.pyc
1
          \---__pycache__
                 __init__.cpython-311.pyc
        +---google
        | +---api
Ī
        | | annotations.proto
           | | annotations_pb2.py
             - 1
                annotations pb2.pyi
                auth.proto
                 auth_pb2.py
                 auth_pb2.pyi
             backend.proto
             backend_pb2.py
                 backend pb2.pyi
1
                 billing.proto
                 billing pb2.py
                billing_pb2.pyi
                 client.proto
                 client_pb2.py
              Τ
                 client_pb2.pyi
             config_change.proto
                 config_change_pb2.py
                 config change pb2.pyi
              consumer.proto
Ī
                 consumer_pb2.py
             consumer_pb2.pyi
I
        1 1
             context.proto
        1 1
             context_pb2.py
       context pb2.pyi
```

```
control.proto
control_pb2.py
control_pb2.pyi
distribution.proto
distribution_pb2.py
distribution pb2.pyi
documentation.proto
documentation pb2.py
documentation_pb2.pyi
endpoint.proto
endpoint_pb2.py
endpoint_pb2.pyi
error reason.proto
error_reason_pb2.py
error reason pb2.pyi
field_behavior.proto
field_behavior_pb2.py
field_behavior_pb2.pyi
field_info.proto
field_info_pb2.py
field info pb2.pyi
http.proto
httpbody.proto
httpbody_pb2.py
httpbody pb2.pyi
http_pb2.py
http_pb2.pyi
label.proto
label_pb2.py
label pb2.pyi
launch_stage.proto
launch_stage_pb2.py
launch_stage_pb2.pyi
log.proto
logging.proto
logging_pb2.py
logging_pb2.pyi
log_pb2.py
log_pb2.pyi
metric.proto
metric_pb2.py
metric_pb2.pyi
monitored_resource.proto
monitored_resource_pb2.py
monitored resource pb2.pyi
monitoring.proto
monitoring_pb2.py
monitoring_pb2.pyi
policy.proto
policy_pb2.py
policy_pb2.pyi
```

```
quota.proto
    quota_pb2.py
    quota_pb2.pyi
    resource.proto
    resource_pb2.py
    resource pb2.pyi
    routing.proto
    routing pb2.py
    routing_pb2.pyi
    service.proto
    service pb2.py
    service_pb2.pyi
    source info.proto
    source_info_pb2.py
    source info pb2.pyi
    system_parameter.proto
    system_parameter_pb2.py
    system_parameter_pb2.pyi
    usage.proto
   usage_pb2.py
    usage pb2.pyi
   visibility.proto
    visibility pb2.py
   visibility_pb2.pyi
\---_pycache_
        annotations_pb2.cpython-311.pyc
        auth pb2.cpython-311.pyc
        backend_pb2.cpython-311.pyc
        billing pb2.cpython-311.pyc
        client_pb2.cpython-311.pyc
        config change pb2.cpython-311.pyc
        consumer_pb2.cpython-311.pyc
        context pb2.cpython-311.pyc
        control_pb2.cpython-311.pyc
        distribution pb2.cpython-311.pyc
        documentation_pb2.cpython-311.pyc
        endpoint pb2.cpython-311.pyc
        error_reason_pb2.cpython-311.pyc
        field behavior pb2.cpython-311.pyc
        field_info_pb2.cpython-311.pyc
        httpbody_pb2.cpython-311.pyc
        http_pb2.cpython-311.pyc
        label_pb2.cpython-311.pyc
        launch stage pb2.cpython-311.pyc
        logging_pb2.cpython-311.pyc
        log_pb2.cpython-311.pyc
        metric_pb2.cpython-311.pyc
        monitored resource pb2.cpython-311.pyc
       monitoring_pb2.cpython-311.pyc
        policy pb2.cpython-311.pyc
```

```
quota_pb2.cpython-311.pyc
                resource pb2.cpython-311.pyc
                routing_pb2.cpython-311.pyc
                service pb2.cpython-311.pyc
                source_info_pb2.cpython-311.pyc
                system parameter pb2.cpython-311.pyc
               usage_pb2.cpython-311.pyc
               visibility pb2.cpython-311.pyc
    +---api_core
           bidi.py
1
           client_info.py
           client logging.py
           client_options.py
           datetime helpers.py
           exceptions.py
           extended_operation.py
           general_helpers.py
           grpc_helpers.py
           grpc_helpers_async.py
            iam.py
           operation.py
           operation async.py
           page_iterator.py
           page iterator async.py
           path_template.py
           protobuf_helpers.py
           py.typed
           rest_helpers.py
           rest streaming.py
           rest_streaming_async.py
           retry_async.py
           timeout.py
           universe.py
           version.py
           version_header.py
            _rest_streaming_base.py
           init .py
       +---future
               async_future.py
               base.py
               polling.py
               _helpers.py
                __init__.py
       \---_pycache_
                   async_future.cpython-311.pyc
                   base.cpython-311.pyc
                   polling.cpython-311.pyc
                   helpers.cpython-311.pyc
```

```
__init__.cpython-311.pyc
+---gapic_v1
        client_info.py
1 1
        config.py
        config async.py
        method.py
        method async.py
        routing_header.py
        __init__.py
1
    1
    \---__pycache__
            client info.cpython-311.pyc
            config.cpython-311.pyc
            config async.cpython-311.pyc
            method.cpython-311.pyc
            method_async.cpython-311.pyc
            routing_header.cpython-311.pyc
             __init__.cpython-311.pyc
+---operations v1
       abstract_operations_base_client.py
        abstract operations client.py
        operations_async_client.py
        operations client.py
        operations_client_config.py
        operations_rest_client_async.py
        pagers.py
        pagers_async.py
        pagers base.py
         __init__.py
   +---transports
            base.py
          rest.py
            rest_asyncio.py
            __init__.py
        \---__pycache__
                base.cpython-311.pyc
                rest.cpython-311.pyc
                rest_asyncio.cpython-311.pyc
                 __init__.cpython-311.pyc
    \--- pycache
            abstract_operations_base_client.cpython-311.pyc
            abstract_operations_client.cpython-311.pyc
            operations_async_client.cpython-311.pyc
            operations client.cpython-311.pyc
            operations_client_config.cpython-311.pyc
            operations rest client async.cpython-311.pyc
```

```
pagers.cpython-311.pyc
                pagers async.cpython-311.pyc
                pagers_base.cpython-311.pyc
                init .cpython-311.pyc
    +---retry
           retry_base.py
      retry streaming.py
           retry_streaming_async.py
            retry_unary.py
           retry_unary_async.py
            __init__.py
       \---__pycache__
                retry base.cpython-311.pyc
                retry_streaming.cpython-311.pyc
                retry_streaming_async.cpython-311.pyc
                retry_unary.cpython-311.pyc
                retry unary async.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
           bidi.cpython-311.pyc
            client_info.cpython-311.pyc
            client logging.cpython-311.pyc
            client_options.cpython-311.pyc
            datetime_helpers.cpython-311.pyc
            exceptions.cpython-311.pyc
            extended_operation.cpython-311.pyc
            general helpers.cpython-311.pyc
            grpc_helpers.cpython-311.pyc
            grpc helpers async.cpython-311.pyc
            iam.cpython-311.pyc
            operation.cpython-311.pyc
            operation_async.cpython-311.pyc
            page iterator.cpython-311.pyc
            page_iterator_async.cpython-311.pyc
            path template.cpython-311.pyc
            protobuf_helpers.cpython-311.pyc
            rest helpers.cpython-311.pyc
            rest_streaming.cpython-311.pyc
            rest_streaming_async.cpython-311.pyc
            retry_async.cpython-311.pyc
            timeout.cpython-311.pyc
            universe.cpython-311.pyc
            version.cpython-311.pyc
            version header.cpython-311.pyc
            _rest_streaming_base.cpython-311.pyc
            init .cpython-311.pyc
+---auth
```

```
api_key.py
                     app_engine.py
                     aws.py
                     credentials.py
                     downscoped.py
                     environment_vars.py
                     exceptions.py
                     external account.py
                     \verb|external_account_authorized_user.py|\\
                     identity_pool.py
                     impersonated_credentials.py
                     jwt.py
                     metrics.py
                     pluggable.py
                     py.typed
                     version.py
                     _cloud_sdk.py
                     _credentials_async.py
                     _credentials_base.py
                     default.py
                     _default_async.py
                     exponential backoff.py
                     _helpers.py
                     jwt async.py
                     _oauth2client.py
                     _refresh_worker.py
                     _service_account_info.py
                     __init__.py
                 - 1
              1
                 +---aio
                | | credentials.py
                  +---transport
                    | | aiohttp.py
                    | | sessions.py
                            __init__.py
                    - 1
                       | \--- pycache
                                aiohttp.cpython-311.pyc
                                sessions.cpython-311.pyc
                                __init__.cpython-311.pyc
                    \---_pycache_
                            credentials.cpython-311.pyc
Ī
                             __init__.cpython-311.pyc
                 +---compute_engine
                | | credentials.py
          | | | metadata.py
```

```
\---__pycache__
                  credentials.cpython-311.pyc
                  _metadata.cpython-311.pyc
                   init .cpython-311.pyc
       +---crypt
         | base.py
               es256.py
               rsa.py
               _cryptography_rsa.py
              helpers.py
               _python_rsa.py
               init .py
           \---_pycache_
                  base.cpython-311.pyc
                  es256.cpython-311.pyc
                  rsa.cpython-311.pyc
                  cryptography rsa.cpython-311.pyc
                  _helpers.cpython-311.pyc
                  python rsa.cpython-311.pyc
                  __init__.cpython-311.pyc
       +---transport
             grpc.py
              mtls.py
               requests.py
              urllib3.py
              _aiohttp_requests.py
              _custom_tls_signer.py
               _http_client.py
               _mtls_helper.py
              _requests_base.py
               __init__.py
          \--- pycache
                  grpc.cpython-311.pyc
                  mtls.cpython-311.pyc
                  requests.cpython-311.pyc
                  urllib3.cpython-311.pyc
                  _aiohttp_requests.cpython-311.pyc
                  _custom_tls_signer.cpython-311.pyc
                  http client.cpython-311.pyc
                  _mtls_helper.cpython-311.pyc
                  _requests_base.cpython-311.pyc
                  __init__.cpython-311.pyc
\---__pycache__
               api key.cpython-311.pyc
```

```
app_engine.cpython-311.pyc
            aws.cpython-311.pyc
            credentials.cpython-311.pyc
            downscoped.cpython-311.pyc
            environment_vars.cpython-311.pyc
            exceptions.cpython-311.pyc
            external_account.cpython-311.pyc
            external account authorized user.cpython-311.pyc
            iam.cpython-311.pyc
            identity_pool.cpython-311.pyc
            impersonated credentials.cpython-311.pyc
            jwt.cpython-311.pyc
            metrics.cpython-311.pyc
            pluggable.cpython-311.pyc
            version.cpython-311.pyc
            _cloud_sdk.cpython-311.pyc
            _credentials_async.cpython-311.pyc
            _credentials_base.cpython-311.pyc
            default.cpython-311.pyc
            _default_async.cpython-311.pyc
            exponential backoff.cpython-311.pyc
            _helpers.cpython-311.pyc
            _jwt_async.cpython-311.pyc
            _oauth2client.cpython-311.pyc
            refresh worker.cpython-311.pyc
            _service_account_info.cpython-311.pyc
            __init__.cpython-311.pyc
+---cloud
       extended operations.proto
       extended_operations_pb2.py
        extended_operations_pb2.pyi
    -1
   +---location
    | | locations.proto
           locations pb2.py
           locations_pb2.pyi
       \---_pycache__
               locations pb2.cpython-311.pyc
    \---_pycache_
            extended_operations_pb2.cpython-311.pyc
+---gapic
    \---metadata
        gapic_metadata.proto
            gapic_metadata_pb2.py
            gapic metadata pb2.pyi
       \--- pycache
```

```
gapic_metadata_pb2.cpython-311.pyc
+---logging
   \---type
        | http_request.proto
           http_request_pb2.py
           http_request_pb2.pyi
           log severity.proto
           log_severity_pb2.py
           log_severity_pb2.pyi
        1
        \---_pycache__
               http request pb2.cpython-311.pyc
               log_severity_pb2.cpython-311.pyc
+---longrunning
        operations_grpc.py
        operations_grpc_pb2.py
        operations_pb2.py
        operations_pb2_grpc.py
        operations_proto.proto
        operations_proto.py
        operations proto pb2.py
        operations_proto_pb2.pyi
   \---__pycache__
           operations_grpc.cpython-311.pyc
           operations_grpc_pb2.cpython-311.pyc
           operations_pb2.cpython-311.pyc
           operations pb2 grpc.cpython-311.pyc
           operations_proto.cpython-311.pyc
           operations_proto_pb2.cpython-311.pyc
+---oauth2
       challenges.py
        credentials.py
        gdch_credentials.py
        id token.py
       py.typed
        reauth.py
        service_account.py
        sts.py
        utils.py
        webauthn_handler.py
        webauthn handler factory.py
        webauthn_types.py
        _client.py
        _client_async.py
        _credentials_async.py
        _id_token_async.py
        _reauth_async.py
```

```
_service_account_async.py
       __init__.py
   \---_pycache_
           challenges.cpython-311.pyc
            credentials.cpython-311.pyc
            gdch_credentials.cpython-311.pyc
            id token.cpython-311.pyc
            reauth.cpython-311.pyc
            service_account.cpython-311.pyc
            sts.cpython-311.pyc
            utils.cpython-311.pyc
            webauthn handler.cpython-311.pyc
            webauthn_handler_factory.cpython-311.pyc
            webauthn types.cpython-311.pyc
            _client.cpython-311.pyc
            _client_async.cpython-311.pyc
            _credentials_async.cpython-311.pyc
            _id_token_async.cpython-311.pyc
            _reauth_async.cpython-311.pyc
            service account async.cpython-311.pyc
            __init__.cpython-311.pyc
+---protobuf
       any.py
        any_pb2.py
        api_pb2.py
       descriptor.py
       descriptor_database.py
       descriptor pb2.py
       descriptor_pool.py
       duration.py
       duration_pb2.py
       empty_pb2.py
        field_mask_pb2.py
       json format.py
       message.py
       message factory.py
       proto.py
       proto builder.py
       proto_json.py
       proto_text.py
        reflection.py
        runtime_version.py
       service_reflection.py
       source_context_pb2.py
       struct_pb2.py
        symbol_database.py
        text encoding.py
        text_format.py
        timestamp.py
```

```
timestamp_pb2.py
    type pb2.py
    unknown_fields.py
    wrappers pb2.py
    __init__.py
+---compiler
       plugin pb2.py
        __init__.py
    \---__pycache__
            plugin_pb2.cpython-311.pyc
             __init__.cpython-311.pyc
+---internal
        api_implementation.py
        builder.py
        containers.py
        decoder.py
        encoder.py
        enum_type_wrapper.py
        extension_dict.py
         field mask.py
        message_listener.py
        python edition defaults.py
        python_message.py
        testing_refleaks.py
        type checkers.py
        well_known_types.py
        wire format.py
         __init__.py
    \---__pycache__
             api implementation.cpython-311.pyc
             builder.cpython-311.pyc
             containers.cpython-311.pyc
             decoder.cpython-311.pyc
             encoder.cpython-311.pyc
             enum_type_wrapper.cpython-311.pyc
             extension dict.cpython-311.pyc
             field_mask.cpython-311.pyc
             message_listener.cpython-311.pyc
             python_edition_defaults.cpython-311.pyc
             python_message.cpython-311.pyc
             testing refleaks.cpython-311.pyc
             type_checkers.cpython-311.pyc
             well_known_types.cpython-311.pyc
             wire_format.cpython-311.pyc
             init .cpython-311.pyc
+---pyext
```

```
| cpp_message.py
| | init .py
   \---_pycache__
            cpp_message.cpython-311.pyc
            init .cpython-311.pyc
 +---testdata
| \---__pycache__
            __init__.cpython-311.pyc
+---util
| | __init__.py
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 | \---__pycache__
            __init__.cpython-311.pyc
 \---_pycache__
         any.cpython-311.pyc
         any_pb2.cpython-311.pyc
         api pb2.cpython-311.pyc
         descriptor.cpython-311.pyc
         descriptor database.cpython-311.pyc
         descriptor_pb2.cpython-311.pyc
         descriptor_pool.cpython-311.pyc
         duration.cpython-311.pyc
         duration_pb2.cpython-311.pyc
         empty pb2.cpython-311.pyc
         field_mask_pb2.cpython-311.pyc
         json format.cpython-311.pyc
         message.cpython-311.pyc
         message factory.cpython-311.pyc
         proto.cpython-311.pyc
         proto builder.cpython-311.pyc
         proto_json.cpython-311.pyc
         proto text.cpython-311.pyc
         reflection.cpython-311.pyc
         runtime version.cpython-311.pyc
         service_reflection.cpython-311.pyc
         source_context_pb2.cpython-311.pyc
         struct_pb2.cpython-311.pyc
         symbol_database.cpython-311.pyc
         text_encoding.cpython-311.pyc
         text_format.cpython-311.pyc
         timestamp.cpython-311.pyc
         timestamp_pb2.cpython-311.pyc
         type pb2.cpython-311.pyc
         unknown_fields.cpython-311.pyc
         wrappers pb2.cpython-311.pyc
```

```
__init__.cpython-311.pyc
+---rpc
        code.proto
   code_pb2.py
        code pb2.pyi
        error_details.proto
        error details pb2.py
        error_details_pb2.pyi
        http.proto
        http_pb2.py
        http_pb2.pyi
        status.proto
        status_pb2.py
        status pb2.pyi
    +---context
            \verb|attribute_context.proto| \\
            attribute_context_pb2.py
            attribute_context_pb2.pyi
            audit context.proto
            audit_context_pb2.py
            audit context pb2.pyi
        \--- pycache
                attribute_context_pb2.cpython-311.pyc
                audit_context_pb2.cpython-311.pyc
    \---__pycache__
            code pb2.cpython-311.pyc
            error_details_pb2.cpython-311.pyc
            http_pb2.cpython-311.pyc
            status_pb2.cpython-311.pyc
+---type
        calendar period.proto
        calendar_period_pb2.py
        calendar_period_pb2.pyi
        color.proto
        color pb2.py
        color_pb2.pyi
        date.proto
        datetime.proto
        datetime_pb2.py
        datetime pb2.pyi
        date_pb2.py
        date_pb2.pyi
        dayofweek.proto
        dayofweek_pb2.py
        dayofweek_pb2.pyi
        decimal.proto
```

```
decimal_pb2.py
   decimal_pb2.pyi
    expr.proto
    expr_pb2.py
    expr_pb2.pyi
    fraction.proto
    fraction_pb2.py
    fraction pb2.pyi
    interval.proto
    interval_pb2.py
    interval_pb2.pyi
    latlng.proto
    latlng pb2.py
    latlng_pb2.pyi
    localized text.proto
    localized_text_pb2.py
    localized_text_pb2.pyi
   money.proto
   money_pb2.py
   money_pb2.pyi
   month.proto
   month_pb2.py
   month pb2.pyi
   phone_number.proto
   phone number pb2.py
   phone_number_pb2.pyi
   postal_address.proto
   postal_address_pb2.py
    postal_address_pb2.pyi
    quaternion.proto
    quaternion_pb2.py
    quaternion_pb2.pyi
    timeofday.proto
    timeofday_pb2.py
    timeofday_pb2.pyi
\---_pycache__
        calendar period pb2.cpython-311.pyc
        color_pb2.cpython-311.pyc
        datetime pb2.cpython-311.pyc
        date_pb2.cpython-311.pyc
        dayofweek_pb2.cpython-311.pyc
        decimal_pb2.cpython-311.pyc
        expr_pb2.cpython-311.pyc
        fraction pb2.cpython-311.pyc
        interval_pb2.cpython-311.pyc
        latlng_pb2.cpython-311.pyc
        localized_text_pb2.cpython-311.pyc
        money_pb2.cpython-311.pyc
       month_pb2.cpython-311.pyc
        phone number pb2.cpython-311.pyc
```

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postal_address_pb2.cpython-311.pyc
                quaternion_pb2.cpython-311.pyc
                timeofday_pb2.cpython-311.pyc
    \---_upb
            message.pyd
+---googleapiclient
        channel.py
        discovery.py
        errors.py
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        http.py
        mimeparse.py
        model.py
        sample tools.py
        schema.py
        version.py
        _auth.py
        _helpers.py
__init__.py
+---discovery_cache
            appengine memcache.py
            base.py
            file cache.py
            __init__.py
        +---documents
                \verb"abusive experience report.v1.js" on
                acceleratedmobilepageurl.vl.json
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                accesscontextmanager.vl.json
                accesscontextmanager.vlbeta.json
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                adexchangebuyer.v1.3.json
                adexchangebuyer.v1.4.json
                adexchangebuyer2.v2beta1.json
                adexperiencereport.v1.json
                \verb|admin.datatransferv1.json|\\
                admin.datatransfer_v1.json
                admin.directoryv1.json
                admin.directory_v1.json
                admin.reportsv1.json
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                adsense.v2.json
                adsensehost.v4.1.json
                adsenseplatform.v1.json
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I	I		I	I	serviceconsumermanagement.v1.json
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I	I	I		I	servicecontrol.v1.json
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I	I			-	servicedirectory.vl.json
I	I	I		- 1	servicedirectory.vlbetal.json
I	I	I		- 1	servicemanagement.v1.json
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I	I	-		- 1	serviceusage.v1.json
-	I	-		-	serviceusage.vlbetal.json
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ı	I	1	1	1	spanner.v1.json
ı	ı	1	-	1	speech.vl.json
ı	ı	I	ı	ı	speech.v1p1beta1.json
ı	ı	I	1	1	speech.v2beta1.json
i	i	·	i	i	sqladmin.vl.json
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					sts.vlbeta.json
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I	I	1	1	-	tagmanager.v2.json
I	I		I	I	tasks.v1.json

I				I	testing.v1.json
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1	I	I	I	I	tpu.vlalphal.json
ı	I	I	I	I	tpu.v2.json
ı	1	I	I	I	tpu.v2alphal.json
1	ı	I	ı	ı	trafficdirector.v2.json
ı	ı	ı	ı	I	trafficdirector.v3.json
i	i	I	i I	1	transcoder.v1.json
·	i				transcoder.v1beta1.json
	'		'		translate.v2.json
	'				-
					translate.v3.json
				1	translate.v3beta1.json
-	l		ı	I	travelimpactmodel.v1.json
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I		l	1	I	vectortile.v1.json
- 1	-	I	1	I	verifiedaccess.vl.json
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1	1	I	1	I	videointelligence.vl.json
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ı	1	I	I	I	videointelligence.vlp2beta1.json
ı	ı	I	I	I	videointelligence.vlp3betal.json
1	ı	I	ı	ı	vision.vl.json
i	i	I	i I	1	vision.vlplbetal.json
·	i	' 	I		vision.vlp2beta1.json
Ċ	'				vmmigration.v1.json
'	1	1			vmmigration.vlalphal.json
	'				
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ı	l	l	I	1	vpcaccess.v1.json
I	I	I		I	vpcaccess.vlbeta1.json
I			I	I	walletobjects.v1.json
I	I	I		I	webfonts.v1.json
I		l		I	webmasters.v3.json
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1	1	I	1	I	websecurityscanner.vlbeta.json
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1	ı	I	ı	ı	workflows.vlbeta.json
1	ı	I	I	ı	workloadmanager.v1.json
i	·	I	ı	I	workspaceevents.v1.json
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youtubeAnalytics.v2.json
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           model.cpython-311.pyc
            sample_tools.cpython-311.pyc
            schema.cpython-311.pyc
            version.cpython-311.pyc
            _auth.cpython-311.pyc
            helpers.cpython-311.pyc
            __init__.cpython-311.pyc
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        INSTALLER
        LICENSE
        METADATA
        RECORD
        top_level.txt
        WHEEL
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        INSTALLER
        LICENSE
        METADATA
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        WHEEL
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        LICENSE
        METADATA
        RECORD
        REQUESTED
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        LICENSE
```

```
METADATA
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       LICENSE
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       top_level.txt
       WHEEL
1
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py.typed
        _abnf.py
       _connection.py
       _events.py
_headers.py
        _readers.py
receivebuffer.py
       _state.py
       util.py
       _version.py
       writers.py
        __init__.py
    +---tests
           helpers.py
           test against stdlib http.py
            test_connection.py
           test_events.py
           test_headers.py
           test_helpers.py
           test_io.py
           test_receivebuffer.py
            test_state.py
            test util.py
            \_init\_.py
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               test_connection.cpython-311.pyc
               test_events.cpython-311.pyc
                test_headers.cpython-311.pyc
               test_helpers.cpython-311.pyc
                test io.cpython-311.pyc
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test_receivebuffer.cpython-311.pyc
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           _receivebuffer.cpython-311.pyc
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           _writers.cpython-311.pyc
            __init__.cpython-311.pyc
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       INSTALLER
       LICENSE.txt
       METADATA
       RECORD
       top_level.txt
       WHEEL
+---httpcore
       py.typed
       _api.py
       exceptions.py
       _models.py
       _ssl.py
       _synchronization.py
       _trace.py
       _utils.py
        __init__.py
    +--- async
       connection.py
           connection pool.py
           http11.py
           http2.py
           http_proxy.py
           interfaces.py
           socks proxy.py
           \_init\_.py
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               http11.cpython-311.pyc
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http2.cpython-311.pyc
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           interfaces.cpython-311.pyc
           socks_proxy.cpython-311.pyc
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+---_backends
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       auto.py
       base.py
       mock.py
       sync.py
       trio.py
       \_init\_.py
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           trio.cpython-311.pyc
            init .cpython-311.pyc
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       http2.py
       http proxy.py
       interfaces.py
       socks_proxy.py
       \_init\_.py
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           interfaces.cpython-311.pyc
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         METADATA
         RECORD
         WHEEL
     \---licenses
             LICENSE.md
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         cacerts.txt
         certs.py
         error.py
         iri2uri.py
         socks.py
         __init__.py
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             certs.cpython-311.pyc
             error.cpython-311.pyc
             iri2uri.cpython-311.pyc
             socks.cpython-311.pyc
             __init__.cpython-311.pyc
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         INSTALLER
         LICENSE
         METADATA
         RECORD
         top_level.txt
         WHEEL
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         _api.py
         _auth.py
         _client.py
        _config.py
 _content.py
         decoders.py
 _exceptions.py
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         _main.py
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         _models.py
 _multipart.py
         _status_codes.py
_types.py
```

```
_urlparse.py
       urls.py
       _utils.py
       __init__.py
        __version__.py
   +---_transports
           asgi.py
           base.py
           default.py
           mock.py
           wsgi.py
           __init__.py
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               base.cpython-311.pyc
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               mock.cpython-311.pyc
               wsgi.cpython-311.pyc
               __init__.cpython-311.pyc
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           _urlparse.cpython-311.pyc
           _urls.cpython-311.pyc
           utils.cpython-311.pyc
           __init__.cpython-311.pyc
           version .cpython-311.pyc
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       entry_points.txt
       INSTALLER
       METADATA
       RECORD
       WHEEL
   \---licenses
           LICENSE.md
```

```
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    codec.py
    compat.py
        core.py
        idnadata.py
        intranges.py
        package_data.py
        py.typed
        uts46data.py
        __init__.py
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            uts46data.cpython-311.pyc
            __init__.cpython-311.pyc
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        INSTALLER
        LICENSE.md
        METADATA
        RECORD
        WHEEL
+---jinja2
        async utils.py
        bccache.py
1
        compiler.py
        constants.py
        debug.py
        defaults.py
        environment.py
        exceptions.py
        ext.py
        filters.py
        idtracking.py
        lexer.py
        loaders.py
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        {\tt meta.py}
        nativetypes.py
        nodes.py
        optimizer.py
        parser.py
        py.typed
        runtime.py
sandbox.py
        tests.py
```

```
utils.py
        visitor.py
        _identifier.py
        __init__.py
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           async_utils.cpython-311.pyc
           bccache.cpython-311.pyc
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            ext.cpython-311.pyc
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            loaders.cpython-311.pyc
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            nativetypes.cpython-311.pyc
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            sandbox.cpython-311.pyc
            tests.cpython-311.pyc
           utils.cpython-311.pyc
           visitor.cpython-311.pyc
            identifier.cpython-311.pyc
            __init__.cpython-311.pyc
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        INSTALLER
        LICENSE.txt
        METADATA
        RECORD
        WHEEL
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       __init__.py
        __init__.pyi
    \---_pycache__
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+---jiter-0.9.0.dist-info
        INSTALLER
```

```
METADATA
RECORD
       WHEEL
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exceptions.py
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       cext.cp311-win amd64.pyd
       _cext.pyi
       __init__.py
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   \---__pycache__
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           __init__.cpython-311.pyc
+---kiwisolver-1.4.8.dist-info
1
       INSTALLER
       LICENSE
       METADATA
       RECORD
-
       top_level.txt
       WHEEL
+---markupsafe
       py.typed
       _native.py
       _speedups.c
       _speedups.cp311-win_amd64.pyd
       _speedups.pyi
       __init__.py
\---_pycache__
           _native.cpython-311.pyc
           __init__.cpython-311.pyc
+---MarkupSafe-2.1.5.dist-info
       INSTALLER
       LICENSE.rst
       METADATA
       RECORD
       top_level.txt
       WHEEL
+---matplotlib
       animation.py
animation.pyi
       artist.py
artist.pyi
axis.py
       axis.pyi
       backend bases.py
```

```
backend_bases.pyi
backend_managers.py
backend_managers.pyi
backend_tools.py
backend_tools.pyi
       bezier.py
       bezier.pyi
category.py
       cbook.py
       cbook.pyi
cm.py
       cm.pyi
1
       collections.py
       collections.pyi
       colorbar.py
colorbar.pyi
       colorizer.py
       colorizer.pyi
colors.py
       colors.pyi
container.py
       container.pyi
contour.py
contour.pyi
       dates.py
       dviread.py
       dviread.pyi
figure.py
1
       figure.pyi
font manager.py
1
       font_manager.pyi
ft2font.cp311-win_amd64.pyd
       ft2font.pyi
gridspec.py
gridspec.pyi
       hatch.py
       hatch.pyi
image.py
       image.pyi
inset.py
       inset.pyi
layout_engine.py
|
       layout_engine.pyi
legend.py
       legend.pyi
ı
legend_handler.py
legend_handler.pyi
       lines.py
lines.pyi
       markers.py
markers.pyi
```

```
mathtext.py
       mathtext.pyi
       mlab.py
mlab.pyi
offsetbox.py
-
       offsetbox.pyi
patches.py
       patches.pyi
       path.py
-
path.pyi
       patheffects.py
patheffects.pyi
py.typed
pylab.py
pyplot.py
quiver.py
quiver.pyi
rcsetup.py
rcsetup.pyi
       sankey.py
sankey.pyi
scale.py
       scale.pyi
spines.py
       spines.pyi
       stackplot.py
stackplot.pyi
-
       streamplot.py
streamplot.pyi
1
       table.py
table.pyi
texmanager.py
texmanager.pyi
text.py
text.pyi
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       textpath.py
       textpath.pyi
ticker.py
       ticker.pyi
transforms.py
       transforms.pyi
typing.py
units.py
widgets.py
       widgets.pyi
_afm.py
_animation_data.py
       _blocking_input.py
_cm.py
_cm_bivar.py
_cm_listed.py
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_cm_multivar.py
       _color_data.py
       _color_data.pyi
       _constrained_layout.py
       _c_internal_utils.cp311-win_amd64.pyd
       _c_internal_utils.pyi
       _docstring.py
       docstring.pyi
       _enums.py
       _enums.pyi
       _fontconfig_pattern.py
       _image.cp311-win_amd64.pyd
image.pyi
       _internal_utils.py
       layoutgrid.py
       _mathtext.py
       _mathtext_data.py
       _path.cp311-win_amd64.pyd
       _path.pyi
_pylab_helpers.py
       _pylab_helpers.pyi
_qhull.cp311-win_amd64.pyd
       qhull.pyi
       _text_helpers.py
       tight bbox.py
       _tight_layout.py
       _tri.cp311-win_amd64.pyd
       _tri.pyi
       _type1font.py
       _version.py
       __init__.py
        __init__.pyi
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      _axes.py
           _axes.pyi
           _base.py
           _base.pyi
           _secondary_axes.py
           _secondary_axes.pyi
           __init__.py
           __init__.pyi
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+---backends
| | backend agg.py
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backend_cairo.py
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    backend_gtk3cairo.py
    backend_gtk4.py
    backend gtk4agg.py
    backend_gtk4cairo.py
    backend macosx.py
    backend_mixed.py
    backend_nbagg.py
    backend_pdf.py
    backend_pgf.py
    backend_ps.py
    backend_qt.py
    backend qt5.py
    backend_qt5agg.py
    backend_qt5cairo.py
    backend_qtagg.py
    backend_qtcairo.py
    backend_svg.py
    backend template.py
    backend_tkagg.py
    backend tkcairo.py
    backend_webagg.py
    backend webagg core.py
    backend_wx.py
    backend_wxagg.py
    backend_wxcairo.py
    qt_compat.py
    registry.py
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    _backend_agg.pyi
    _backend_gtk.py
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    _backend_tk.py
    _macosx.pyi
    _tkagg.cp311-win_amd64.pyd
    tkagg.pyi
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+---web backend
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all_figures.html
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       single_figure.html
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            mpl.css
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           mpl tornado.js
            nbagg_mpl.js
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qt4_editor_options.svg
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        subplots-symbolic.svg
        subplots.pdf
        subplots.png
        subplots.svg
        subplots_large.png
        zoom to rect-symbolic.svg
        zoom_to_rect.pdf
        zoom_to_rect.png
        zoom to rect.svg
        zoom_to_rect_large.png
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        jacksboro fault dem.npz
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        classic.mplstyle
        {\tt dark\_background.mplstyle}
        fast.mplstyle
        fivethirtyeight.mplstyle
        ggplot.mplstyle
        grayscale.mplstyle
        petroff10.mplstyle
        seaborn-v0 8-bright.mplstyle
        seaborn-v0_8-colorblind.mplstyle
        seaborn-v0_8-dark-palette.mplstyle
        seaborn-v0_8-dark.mplstyle
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        seaborn-v0_8-deep.mplstyle
        seaborn-v0 8-muted.mplstyle
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            seaborn-v0_8-talk.mplstyle
            seaborn-v0 8-ticks.mplstyle
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            seaborn-v0 8-whitegrid.mplstyle
            {\tt seaborn-v0\_8.mplstyle}
            Solarize_Light2.mplstyle
            tableau-colorblind10.mplstyle
            _classic_test_patch.mplstyle
            mpl-gallery-nogrid.mplstyle
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        geo.py
        geo.pyi
        polar.py
        polar.pyi
        init .py
        __init__.pyi
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            polar.cpython-311.pyc
            __init__.cpython-311.pyc
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        plot_directive.py
        roles.py
        __init__.py
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        core.py
        core.pyi
        __init__.py
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            __init__.cpython-311.pyc
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                  compare.py
                  compare.pyi
                       conftest.py
                       conftest.pyi
                       decorators.py
                       decorators.pyi
                       exceptions.py
                       widgets.py
                       widgets.pyi
                       markers.py
                       __init__.py
                       __init__.pyi
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                          Duration.py
                           Epoch.py
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                  conftest.py
                       test_afm.py
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                   -
                       test_animation.py
                       test_api.py
                       test arrow patches.py
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test_artist.py
                        test_axes.py
                        test_axis.py
                        test_backends_interactive.py
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                        test backend cairo.py
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                        test_backend_macosx.py
                        test_backend_nbagg.py
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                        test_backend_pgf.py
                        test_backend_ps.py
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                        test_backend_svg.py
                        test_backend_template.py
                        test_backend_tk.py
                        test_backend_tools.py
                        test_backend_webagg.py
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                        test_bbox_tight.py
                        test bezier.py
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                        test_colorbar.py
                        test colors.py
                        test_compare_images.py
                        test constrainedlayout.py
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                        test_contour.py
                        test_cycles.py
                        test_dates.py
                        test_datetime.py
                        test determinism.py
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                        test_figure.py
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                        test_ft2font.py
                        test_getattr.py
                        test_gridspec.py
                        test image.py
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test_multivariate_colormaps.py
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I	I			test_path.cpython-311.pyc
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            test table.cpython-311.pyc
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            test tightlayout.cpython-311.pyc
            test_transforms.cpython-311.pyc
            test triangulation.cpython-311.pyc
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       _tricontour.py
       _tricontour.pyi
       _trifinder.py
       trifinder.pyi
       _triinterpolate.py
       triinterpolate.pyi
       _tripcolor.py
       tripcolor.pyi
        _triplot.py
       _triplot.pyi
       _trirefine.py
       _trirefine.pyi
        tritools.py
       _tritools.pyi
        __init__.py
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           tricontour.cpython-311.pyc
```

```
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           _triplot.cpython-311.pyc
           _trirefine.cpython-311.pyc
           tritools.cpython-311.pyc
           __init__.cpython-311.pyc
+---_api
       deprecation.py
       deprecation.pyi
       __init__.py
       __init__.pyi
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           __init__.cpython-311.pyc
\---__pycache__
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       axis.cpython-311.pyc
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       backend_managers.cpython-311.pyc
       backend tools.cpython-311.pyc
       bezier.cpython-311.pyc
        category.cpython-311.pyc
       cbook.cpython-311.pyc
        cm.cpython-311.pyc
        collections.cpython-311.pyc
        colorbar.cpython-311.pyc
        colorizer.cpython-311.pyc
        colors.cpython-311.pyc
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        contour.cpython-311.pyc
        dates.cpython-311.pyc
        dviread.cpython-311.pyc
        figure.cpython-311.pyc
        font_manager.cpython-311.pyc
        gridspec.cpython-311.pyc
        hatch.cpython-311.pyc
        image.cpython-311.pyc
        inset.cpython-311.pyc
        layout_engine.cpython-311.pyc
        legend.cpython-311.pyc
        legend_handler.cpython-311.pyc
        lines.cpython-311.pyc
       markers.cpython-311.pyc
       mathtext.cpython-311.pyc
       mlab.cpython-311.pyc
       offsetbox.cpython-311.pyc
```

```
path.cpython-311.pyc
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            pylab.cpython-311.pyc
            pyplot.cpython-311.pyc
            quiver.cpython-311.pyc
            rcsetup.cpython-311.pyc
            sankey.cpython-311.pyc
            scale.cpython-311.pyc
            spines.cpython-311.pyc
            stackplot.cpython-311.pyc
            streamplot.cpython-311.pyc
            table.cpython-311.pyc
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            transforms.cpython-311.pyc
            typing.cpython-311.pyc
            units.cpython-311.pyc
            widgets.cpython-311.pyc
            _afm.cpython-311.pyc
            animation data.cpython-311.pyc
            _blocking_input.cpython-311.pyc
            cm.cpython-311.pyc
            _cm_bivar.cpython-311.pyc
            _cm_listed.cpython-311.pyc
            cm multivar.cpython-311.pyc
            _color_data.cpython-311.pyc
            constrained layout.cpython-311.pyc
            _docstring.cpython-311.pyc
            _enums.cpython-311.pyc
            _fontconfig_pattern.cpython-311.pyc
            _internal_utils.cpython-311.pyc
            _layoutgrid.cpython-311.pyc
            mathtext.cpython-311.pyc
            _mathtext_data.cpython-311.pyc
            pylab helpers.cpython-311.pyc
            _text_helpers.cpython-311.pyc
            tight bbox.cpython-311.pyc
            _tight_layout.cpython-311.pyc
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            _version.cpython-311.pyc
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+---matplotlib-3.10.1.dist-info
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        METADATA
        RECORD
        WHEEL
```

patches.cpython-311.pyc

```
+---mpl_toolkits
| +---axes_grid1
           anchored artists.py
           axes_divider.py
           axes grid.py
           axes_rgb.py
           axes size.py
           inset_locator.py
           mpl_axes.py
           parasite_axes.py
           __init__.py
       +---tests
          | conftest.py
           test_axes_grid1.py
              __init__.py
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                   test_axes_grid1.cpython-311.pyc
                   __init__.cpython-311.pyc
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               axes_grid.cpython-311.pyc
               axes rgb.cpython-311.pyc
               axes_size.cpython-311.pyc
               inset locator.cpython-311.pyc
               mpl_axes.cpython-311.pyc
               parasite_axes.cpython-311.pyc
               __init__.cpython-311.pyc
   +---axisartist
           angle_helper.py
           axes_divider.py
           axislines.py
           axisline_style.py
           axis artist.py
           floating_axes.py
           grid_finder.py
           grid_helper_curvelinear.py
           parasite_axes.py
           __init__.py
      +---tests
      | | conftest.py
      | test_angle_helper.py
             test_axislines.py
      | | test axis artist.py
```

```
test_floating_axes.py
           test grid finder.py
           test_grid_helper_curvelinear.py
           __init__.py
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                test angle helper.cpython-311.pyc
               test_axislines.cpython-311.pyc
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               test_floating_axes.cpython-311.pyc
               test_grid_finder.cpython-311.pyc
               test grid helper curvelinear.cpython-311.pyc
               __init__.cpython-311.pyc
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           axes_divider.cpython-311.pyc
           axislines.cpython-311.pyc
           axisline_style.cpython-311.pyc
           axis artist.cpython-311.pyc
           floating_axes.cpython-311.pyc
           grid finder.cpython-311.pyc
           grid_helper_curvelinear.cpython-311.pyc
           parasite axes.cpython-311.pyc
           __init__.cpython-311.pyc
\---mplot3d
       art3d.py
       axes3d.py
       axis3d.py
       proj3d.py
       __init__.py
    +---tests
        | conftest.py
           test_art3d.py
           test axes3d.py
           test_legend3d.py
           init .py
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               test axes3d.cpython-311.pyc
               test_legend3d.cpython-311.pyc
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           axes3d.cpython-311.pyc
```

```
axis3d.cpython-311.pyc
                proj3d.cpython-311.pyc
                __init__.cpython-311.pyc
+---mpmath
        ctx_base.py
        ctx_fp.py
        ctx iv.py
        ctx_mp.py
        ctx_mp_python.py
1
        function_docs.py
        identification.py
        math2.py
1
        rational.py
        usertools.py
        visualization.py
        __init__.py
    +---calculus
            approximation.py
            calculus.py
            differentiation.py
            extrapolation.py
            inverselaplace.py
            odes.py
            optimization.py
            polynomials.py
            quadrature.py
            __init__.py
        1
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                odes.cpython-311.pyc
                optimization.cpython-311.pyc
                polynomials.cpython-311.pyc
                quadrature.cpython-311.pyc
                __init__.cpython-311.pyc
    +---functions
            bessel.py
            elliptic.py
            expintegrals.py
            factorials.py
            functions.py
            hypergeometric.py
            orthogonal.py
            qfunctions.py
```

```
rszeta.py
        signals.py
        theta.py
        zeta.py
        zetazeros.py
        init .py
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           expintegrals.cpython-311.pyc
            factorials.cpython-311.pyc
            functions.cpython-311.pyc
           hypergeometric.cpython-311.pyc
           orthogonal.cpython-311.pyc
           qfunctions.cpython-311.pyc
            rszeta.cpython-311.pyc
            signals.cpython-311.pyc
            theta.cpython-311.pyc
           zeta.cpython-311.pyc
            zetazeros.cpython-311.pyc
            __init__.cpython-311.pyc
+---libmp
        backend.py
        gammazeta.py
        libelefun.py
        libhyper.py
        libintmath.py
        libmpc.py
        libmpf.py
        libmpi.py
        __init__.py
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           libhyper.cpython-311.pyc
           libintmath.cpython-311.pyc
           libmpc.cpython-311.pyc
           libmpf.cpython-311.pyc
           libmpi.cpython-311.pyc
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+---matrices
        calculus.py
        eigen.py
        eigen_symmetric.py
        linalg.py
       matrices.py
```

```
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                           eigen symmetric.cpython-311.pyc
                           linalg.cpython-311.pyc
                           matrices.cpython-311.pyc
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                  extratest_gamma.py
                       extratest zeta.py
                       runtests.py
                       test basic ops.py
                       test_bitwise.py
                       test_calculus.py
                       test_compatibility.py
                       test convert.py
                       test_diff.py
                       test division.py
                       test_eigen.py
                       test eigen symmetric.py
                       test_elliptic.py
                       test fp.py
                       test_functions.py
                       test_functions2.py
                       test gammazeta.py
                       test_hp.py
                       test identify.py
                       test_interval.py
                       test levin.py
                       test_linalg.py
                       test matrices.py
                       test_mpmath.py
                       test ode.py
                       test_pickle.py
                       test power.py
                       test_quad.py
                       test rootfinding.py
                       test_special.py
                       test_str.py
                       test_summation.py
                       test_trig.py
                       test visualization.py
                       torture.py
ı
                       __init__.py
           \---__pycache__
           extratest_gamma.cpython-311.pyc
                           extratest zeta.cpython-311.pyc
```

```
runtests.cpython-311.pyc
                test basic ops.cpython-311.pyc
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                test calculus.cpython-311.pyc
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                test convert.cpython-311.pyc
                test_diff.cpython-311.pyc
                test division.cpython-311.pyc
                test eigen.cpython-311.pyc
                test_eigen_symmetric.cpython-311.pyc
                test elliptic.cpython-311.pyc
                test_fp.cpython-311.pyc
                test functions.cpython-311.pyc
                test_functions2.cpython-311.pyc
                test gammazeta.cpython-311.pyc
                test_hp.cpython-311.pyc
                test identify.cpython-311.pyc
                test_interval.cpython-311.pyc
                test levin.cpython-311.pyc
                test_linalg.cpython-311.pyc
                test matrices.cpython-311.pyc
                test_mpmath.cpython-311.pyc
                test ode.cpython-311.pyc
                test_pickle.cpython-311.pyc
                test power.cpython-311.pyc
                test_quad.cpython-311.pyc
                test_rootfinding.cpython-311.pyc
                test special.cpython-311.pyc
                test_str.cpython-311.pyc
                test summation.cpython-311.pyc
                test_trig.cpython-311.pyc
                test visualization.cpython-311.pyc
                torture.cpython-311.pyc
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            ctx mp.cpython-311.pyc
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            math2.cpython-311.pyc
            rational.cpython-311.pyc
            usertools.cpython-311.pyc
            visualization.cpython-311.pyc
            __init__.cpython-311.pyc
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        INSTALLER
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```
LICENSE
        METADATA
        RECORD
top_level.txt
WHEEL
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        multipart.py
        __init__.py
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            exceptions.cpython-311.pyc
            multipart.cpython-311.pyc
            __init__.cpython-311.pyc
+---networkx
        conftest.py
        convert.py
        convert_matrix.py
        exception.py
        lazy_imports.py
        relabel.py
        __init__.py
    +---algorithms
            asteroidal.py
            boundary.py
            bridges.py
            broadcasting.py
            chains.py
            chordal.py
            clique.py
            cluster.py
            communicability_alg.py
            core.py
            covering.py
            cuts.py
            cycles.py
            dag.py
            distance_measures.py
            distance_regular.py
            dominance.py
            dominating.py
            d_separation.py
            efficiency_measures.py
            euler.py
            graphical.py
            graph hashing.py
```

```
hierarchy.py
                        hybrid.py
                        isolate.py
                        link prediction.py
                        lowest_common_ancestors.py
                        matching.py
                        mis.py
                        moral.py
                        node_classification.py
                        non_randomness.py
                        planarity.py
                        planar_drawing.py
                        polynomials.py
                        reciprocity.py
                        regular.py
                        richclub.py
                        similarity.py
                        simple_paths.py
                        smallworld.py
                        smetric.py
                        sparsifiers.py
                        structuralholes.py
                        summarization.py
                        swap.py
                        threshold.py
                        time_dependent.py
                        tournament.py
                        triads.py
                        vitality.py
                        voronoi.py
                        walks.py
                        wiener.py
                        __init__.py
                    +---approximation
                            clique.py
                            clustering_coefficient.py
                            connectivity.py
                            distance_measures.py
                            dominating set.py
                            kcomponents.py
                        |
                            matching.py
                    -
                            maxcut.py
                            ramsey.py
                            steinertree.py
                    traveling_salesman.py
ı
                            treewidth.py
                            vertex_cover.py
                            __init__.py
                    +---tests
```

```
test_approx_clust_coeff.py
            test clique.py
            test_connectivity.py
    -
            test distance measures.py
            test_dominating_set.py
            test kcomponents.py
            test_matching.py
            test maxcut.py
            test ramsey.py
            test_steinertree.py
            test_traveling_salesman.py
            test_treewidth.py
            test vertex cover.py
            __init__.py
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                test_clique.cpython-311.pyc
                test connectivity.cpython-311.pyc
                test_distance_measures.cpython-311.pyc
                test dominating set.cpython-311.pyc
                test_kcomponents.cpython-311.pyc
                test matching.cpython-311.pyc
                test_maxcut.cpython-311.pyc
                test ramsey.cpython-311.pyc
                test_steinertree.cpython-311.pyc
                test_traveling_salesman.cpython-311.pyc
                test treewidth.cpython-311.pyc
                test_vertex_cover.cpython-311.pyc
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            clustering coefficient.cpython-311.pyc
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            distance measures.cpython-311.pyc
            dominating_set.cpython-311.pyc
            kcomponents.cpython-311.pyc
            matching.cpython-311.pyc
            maxcut.cpython-311.pyc
            ramsey.cpython-311.pyc
            steinertree.cpython-311.pyc
            traveling_salesman.cpython-311.pyc
            treewidth.cpython-311.pyc
            vertex cover.cpython-311.pyc
            __init__.cpython-311.pyc
+---assortativity
       connectivity.py
        correlation.py
        mixing.py
```

```
neighbor_degree.py
                          pairs.py
                           __init__.py
                     +---tests
                      base test.py
                              test_connectivity.py
                              test correlation.py
                              test_mixing.py
                              test_neighbor_degree.py
                              test pairs.py
                              __init__.py
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                                  test_correlation.cpython-311.pyc
                                  test_mixing.cpython-311.pyc
                                  test neighbor degree.cpython-311.pyc
                                  test_pairs.cpython-311.pyc
                                   __init__.cpython-311.pyc
                       \---_pycache_
                              connectivity.cpython-311.pyc
                              correlation.cpython-311.pyc
                              mixing.cpython-311.pyc
                              neighbor_degree.cpython-311.pyc
                              pairs.cpython-311.pyc
                              __init__.cpython-311.pyc
                   +---bipartite
                          basic.py
                           centrality.py
                           cluster.py
                           covering.py
                           edgelist.py
                           extendability.py
                           generators.py
                           matching.py
                           matrix.py
                           projection.py
                           redundancy.py
                           spectral.py
                           __init__.py
                     +---tests
ı
                      | | test_basic.py
                         test_centrality.py
                     1 1
                              test cluster.py
                              test_covering.py
                              test edgelist.py
```

```
test_extendability.py
            test generators.py
            test_matching.py
            test matrix.py
            test_project.py
            test redundancy.py
            test_spectral_bipartivity.py
            init .py
       \---_pycache_
                test basic.cpython-311.pyc
                test_centrality.cpython-311.pyc
                test cluster.cpython-311.pyc
                test_covering.cpython-311.pyc
                test edgelist.cpython-311.pyc
                test_extendability.cpython-311.pyc
                test generators.cpython-311.pyc
                test_matching.cpython-311.pyc
                test matrix.cpython-311.pyc
                test_project.cpython-311.pyc
                test redundancy.cpython-311.pyc
                test_spectral_bipartivity.cpython-311.pyc
                init .cpython-311.pyc
    \--- pycache
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            centrality.cpython-311.pyc
            cluster.cpython-311.pyc
            covering.cpython-311.pyc
            edgelist.cpython-311.pyc
            extendability.cpython-311.pyc
            generators.cpython-311.pyc
            matching.cpython-311.pyc
            matrix.cpython-311.pyc
            projection.cpython-311.pyc
            redundancy.cpython-311.pyc
            spectral.cpython-311.pyc
            init .cpython-311.pyc
+---centrality
       betweenness.py
       betweenness_subset.py
       closeness.py
        current_flow_betweenness.py
       current flow betweenness subset.py
       current_flow_closeness.py
        degree_alg.py
       dispersion.py
eigenvector.py
        flow_matrix.py
        group.py
```

```
harmonic.py
   katz.py
   laplacian.py
   load.py
   percolation.py
   reaching.py
   second_order.py
   subgraph alg.py
   trophic.py
   voterank_alg.py
    init .py
+---tests
       test_betweenness_centrality.py
        test_betweenness_centrality_subset.py
        test_closeness_centrality.py
        test_current_flow_betweenness_centrality.py
        test_current_flow_betweenness_centrality_subset.py
        test_current_flow_closeness.py
        test_degree_centrality.py
        test dispersion.py
        test_eigenvector_centrality.py
        test group.py
        test_harmonic_centrality.py
        test katz centrality.py
        test_laplacian_centrality.py
        test_load_centrality.py
        test percolation centrality.py
        test_reaching.py
        test second order centrality.py
        test_subgraph.py
        test trophic.py
        test_voterank.py
   \--- pycache
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           test betweenness centrality subset.cpython-311.pyc
           test_closeness_centrality.cpython-311.pyc
           test current flow betweenness centrality.cpython-311.pyc
           test_current_flow_betweenness_centrality_subset.cpython-311.pyc
           test_current_flow_closeness.cpython-311.pyc
           test_degree_centrality.cpython-311.pyc
           test_dispersion.cpython-311.pyc
           test eigenvector centrality.cpython-311.pyc
           test_group.cpython-311.pyc
           test_harmonic_centrality.cpython-311.pyc
           test_katz_centrality.cpython-311.pyc
           test laplacian centrality.cpython-311.pyc
           test_load_centrality.cpython-311.pyc
           test percolation centrality.cpython-311.pyc
```

```
test_reaching.cpython-311.pyc
                   test second order centrality.cpython-311.pyc
                   test_subgraph.cpython-311.pyc
                   test trophic.cpython-311.pyc
                   test_voterank.cpython-311.pyc
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               betweenness_subset.cpython-311.pyc
               closeness.cpython-311.pyc
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               current flow betweenness subset.cpython-311.pyc
               current_flow_closeness.cpython-311.pyc
               degree_alg.cpython-311.pyc
               dispersion.cpython-311.pyc
                eigenvector.cpython-311.pyc
                flow_matrix.cpython-311.pyc
               group.cpython-311.pyc
               harmonic.cpython-311.pyc
                katz.cpython-311.pyc
                laplacian.cpython-311.pyc
                load.cpython-311.pyc
               percolation.cpython-311.pyc
                reaching.cpython-311.pyc
                second_order.cpython-311.pyc
                subgraph_alg.cpython-311.pyc
               trophic.cpython-311.pyc
               voterank_alg.cpython-311.pyc
                init .cpython-311.pyc
    +---coloring
        | equitable_coloring.py
           greedy coloring.py
            __init__.py
      +---tests
       | | test coloring.py
          | __init__.py
           \---__pycache__
                   test_coloring.cpython-311.pyc
                    __init__.cpython-311.pyc
        \--- pycache
               equitable_coloring.cpython-311.pyc
               greedy coloring.cpython-311.pyc
               __init__.cpython-311.pyc
    +---community
| | asyn fluid.py
```

```
centrality.py
   community_utils.py
   divisive.py
   kclique.py
   kernighan_lin.py
   label propagation.py
   louvain.py
   lukes.py
   modularity_max.py
   quality.py
    __init__.py
+---tests
       test_asyn_fluid.py
        test centrality.py
        test_divisive.py
        test kclique.py
        test_kernighan_lin.py
        test_label_propagation.py
        test_louvain.py
        test lukes.py
        test_modularity_max.py
        test quality.py
        test_utils.py
        init .py
   \---_pycache__
            test asyn fluid.cpython-311.pyc
            test_centrality.cpython-311.pyc
            test divisive.cpython-311.pyc
            test_kclique.cpython-311.pyc
            test_kernighan_lin.cpython-311.pyc
            test_label_propagation.cpython-311.pyc
            test louvain.cpython-311.pyc
            test_lukes.cpython-311.pyc
            test_modularity_max.cpython-311.pyc
            test_quality.cpython-311.pyc
            test utils.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        asyn_fluid.cpython-311.pyc
        centrality.cpython-311.pyc
        community_utils.cpython-311.pyc
       divisive.cpython-311.pyc
        kclique.cpython-311.pyc
        kernighan_lin.cpython-311.pyc
        label_propagation.cpython-311.pyc
        louvain.cpython-311.pyc
       lukes.cpython-311.pyc
       modularity max.cpython-311.pyc
```

```
quality.cpython-311.pyc
                              __init__.cpython-311.pyc
                  +---components
                   | | attracting.py
                          biconnected.py
                          connected.py
                          semiconnected.py
                          strongly_connected.py
                          weakly_connected.py
                          __init__.py
                      +---tests
                     | | test_attracting.py
                         - 1
                              test biconnected.py
                       1 1
                              test_connected.py
                              test_semiconnected.py
                              test_strongly_connected.py
                              test_weakly_connected.py
                      __init__.py
                       \---__pycache__
                       test attracting.cpython-311.pyc
                                  test_biconnected.cpython-311.pyc
                                  test connected.cpython-311.pyc
                                  test_semiconnected.cpython-311.pyc
                                  test_strongly_connected.cpython-311.pyc
                                  test weakly connected.cpython-311.pyc
                                  __init__.cpython-311.pyc
                   1
                      1
                      \---__pycache__
                              attracting.cpython-311.pyc
                              biconnected.cpython-311.pyc
                              connected.cpython-311.pyc
                              semiconnected.cpython-311.pyc
                              strongly connected.cpython-311.pyc
                              weakly_connected.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---connectivity
                     | connectivity.py
                          cuts.py
                          disjoint_paths.py
                          edge_augmentation.py
                          edge kcomponents.py
                       kcomponents.py
ı
                          kcutsets.py
                          stoerwagner.py
                  -
                          utils.py
                          __init__.py
```

```
+---tests
   1 1
             test connectivity.py
     | |
             test_cuts.py
             test disjoint paths.py
             test_edge_augmentation.py
             test edge kcomponents.py
             test_kcomponents.py
             test kcutsets.py
            test_stoer_wagner.py
             __init__.py
     1
        - 1
         \---_pycache_
                test connectivity.cpython-311.pyc
                test_cuts.cpython-311.pyc
                 test disjoint paths.cpython-311.pyc
                 test_edge_augmentation.cpython-311.pyc
                test_edge_kcomponents.cpython-311.pyc
                test_kcomponents.cpython-311.pyc
                 test kcutsets.cpython-311.pyc
                 test_stoer_wagner.cpython-311.pyc
                 init .cpython-311.pyc
     \---_pycache_
             connectivity.cpython-311.pyc
             cuts.cpython-311.pyc
             disjoint_paths.cpython-311.pyc
             edge_augmentation.cpython-311.pyc
             edge kcomponents.cpython-311.pyc
             kcomponents.cpython-311.pyc
             kcutsets.cpython-311.pyc
             stoerwagner.cpython-311.pyc
             utils.cpython-311.pyc
             __init__.cpython-311.pyc
 +---flow
         boykovkolmogorov.py
         capacityscaling.py
         dinitz alg.py
         edmondskarp.py
         gomory hu.py
         maxflow.py
         mincost.py
         networksimplex.py
         preflowpush.py
         shortestaugmentingpath.py
         utils.py
         init .py
    +---tests
   | | gl1.gpickle.bz2
| | gwl.gpickle.bz2
```

```
netgen-2.gpickle.bz2
           test_gomory_hu.py
           test_maxflow.py
  test_maxflow_large_graph.py
           test_mincost.py
           test networksimplex.py
           wlm3.gpickle.bz2
           init .py
       \---_pycache_
               test_gomory_hu.cpython-311.pyc
               test_maxflow.cpython-311.pyc
               test maxflow large graph.cpython-311.pyc
               test_mincost.cpython-311.pyc
               test networksimplex.cpython-311.pyc
                __init__.cpython-311.pyc
   \---__pycache__
           boykovkolmogorov.cpython-311.pyc
           capacityscaling.cpython-311.pyc
           dinitz alg.cpython-311.pyc
           edmondskarp.cpython-311.pyc
           gomory hu.cpython-311.pyc
           maxflow.cpython-311.pyc
           mincost.cpython-311.pyc
           networksimplex.cpython-311.pyc
           preflowpush.cpython-311.pyc
           shortestaugmentingpath.cpython-311.pyc
           utils.cpython-311.pyc
            init .cpython-311.pyc
+---isomorphism
       ismags.py
       isomorph.py
       isomorphvf2.py
       matchhelpers.py
       temporalisomorphvf2.py
       tree isomorphism.py
       vf2pp.py
       vf2userfunc.py
       __init__.py
  +---tests
           iso_r01_s80.A99
           iso r01 s80.B99
           si2_b06_m200.A99
           si2_b06_m200.B99
           test_ismags.py
  test isomorphism.py
           test_isomorphvf2.py
           test match helpers.py
```

```
test_temporalisomorphvf2.py
           test_tree_isomorphism.py
            test_vf2pp.py
  test_vf2pp_helpers.py
            test_vf2userfunc.py
            init .py
      \--- pycache
                test_ismags.cpython-311.pyc
                test_isomorphism.cpython-311.pyc
                test isomorphvf2.cpython-311.pyc
                test_match_helpers.cpython-311.pyc
                test temporalisomorphvf2.cpython-311.pyc
                {\tt test\_tree\_isomorphism.cpython-311.pyc}
                test vf2pp.cpython-311.pyc
                test_vf2pp_helpers.cpython-311.pyc
                test vf2userfunc.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache_
            ismags.cpython-311.pyc
            isomorph.cpython-311.pyc
            isomorphvf2.cpython-311.pyc
            matchhelpers.cpython-311.pyc
            temporalisomorphvf2.cpython-311.pyc
            tree_isomorphism.cpython-311.pyc
            vf2pp.cpython-311.pyc
            vf2userfunc.cpython-311.pyc
            __init__.cpython-311.pyc
+---link_analysis
| | hits_alg.py
        pagerank_alg.py
        __init__.py
  +---tests
   | | test_hits.py
    | | test pagerank.py
            __init__.py
      \---__pycache__
                test_hits.cpython-311.pyc
                test_pagerank.cpython-311.pyc
                __init__.cpython-311.pyc
  \---__pycache__
           hits_alg.cpython-311.pyc
            pagerank_alg.cpython-311.pyc
            __init__.cpython-311.pyc
+---minors
```

```
| | | contraction.py
         1 1
              | +---tests
| | test_contraction.py
1
                 1
                 | \---__pycache__
                            test contraction.cpython-311.pyc
              | \---_pycache__
                        contraction.cpython-311.pyc
                        __init__.cpython-311.pyc
              +---operators
              | | all.py
              | | binary.py
                 | product.py
Ī
               | | unary.py
                     __init__.py
1
                 | +---tests
1
              | | test_all.py
                  | | test binary.py
               | | test_product.py
                 | | test unary.py
                        __init__.py
                 1 1 1
                 | \---_pycache_
                           test_all.cpython-311.pyc
                            test binary.cpython-311.pyc
                           test_product.cpython-311.pyc
                           test_unary.cpython-311.pyc
                            __init__.cpython-311.pyc
                 \---_pycache_
                        all.cpython-311.pyc
                        binary.cpython-311.pyc
                        product.cpython-311.pyc
                        unary.cpython-311.pyc
                        init .cpython-311.pyc
Τ
               +---shortest_paths
              | | astar.py
               | | dense.py
1
                    generic.py
               | | unweighted.py
Ī
                 | weighted.py
                     __init__.py
              1 1
              | | +---tests
        | | | | test astar.py
```

```
test_dense.py
            test_dense_numpy.py
            test_generic.py
            test_unweighted.py
            test_weighted.py
            init .py
       \---_pycache_
               test_astar.cpython-311.pyc
                test_dense.cpython-311.pyc
                test_dense_numpy.cpython-311.pyc
                test_generic.cpython-311.pyc
                test unweighted.cpython-311.pyc
                test_weighted.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache__
            astar.cpython-311.pyc
            dense.cpython-311.pyc
            generic.cpython-311.pyc
            unweighted.cpython-311.pyc
            weighted.cpython-311.pyc
            init .cpython-311.pyc
+---tests
       test_asteroidal.py
        test_boundary.py
        test bridges.py
        test_broadcasting.py
        test chains.py
        test_chordal.py
        test_clique.py
        test_cluster.py
        test communicability.py
        test_core.py
        test covering.py
        test_cuts.py
        test cycles.py
        test_dag.py
        test distance measures.py
        test_distance_regular.py
        test_dominance.py
        test_dominating.py
        test_d_separation.py
        test efficiency.py
test_euler.py
        test_graphical.py
        test_graph_hashing.py
test hierarchy.py
       test_hybrid.py
        test isolate.py
```

```
test_link_prediction.py
    test_lowest_common_ancestors.py
    test_matching.py
    test_max_weight_clique.py
    test_mis.py
    test moral.py
    test_node_classification.py
    test non randomness.py
    test planarity.py
    test_planar_drawing.py
    test polynomials.py
    test_reciprocity.py
    test regular.py
    test_richclub.py
    test similarity.py
    test_simple_paths.py
    test smallworld.py
    test_smetric.py
    test sparsifiers.py
    test_structuralholes.py
    test summarization.py
    test_swap.py
    test threshold.py
    test_time_dependent.py
    test tournament.py
    test_triads.py
    test_vitality.py
    test voronoi.py
    test_walks.py
    test wiener.py
    __init__.py
\---__pycache__
        test asteroidal.cpython-311.pyc
        test_boundary.cpython-311.pyc
        test bridges.cpython-311.pyc
        test_broadcasting.cpython-311.pyc
        test chains.cpython-311.pyc
        test_chordal.cpython-311.pyc
        test clique.cpython-311.pyc
        test_cluster.cpython-311.pyc
        test_communicability.cpython-311.pyc
        test_core.cpython-311.pyc
        test_covering.cpython-311.pyc
        test cuts.cpython-311.pyc
        test_cycles.cpython-311.pyc
        test_dag.cpython-311.pyc
        test_distance_measures.cpython-311.pyc
        test distance regular.cpython-311.pyc
        test_dominance.cpython-311.pyc
        test dominating.cpython-311.pyc
```

```
test_d_separation.cpython-311.pyc
            test efficiency.cpython-311.pyc
            test_euler.cpython-311.pyc
            test graphical.cpython-311.pyc
            test_graph_hashing.cpython-311.pyc
            test hierarchy.cpython-311.pyc
            test_hybrid.cpython-311.pyc
            test isolate.cpython-311.pyc
            test_link_prediction.cpython-311.pyc
            test_lowest_common_ancestors.cpython-311.pyc
            test matching.cpython-311.pyc
            test_max_weight_clique.cpython-311.pyc
            test mis.cpython-311.pyc
            test_moral.cpython-311.pyc
            test node classification.cpython-311.pyc
            test_non_randomness.cpython-311.pyc
            test_planarity.cpython-311.pyc
            test_planar_drawing.cpython-311.pyc
            test polynomials.cpython-311.pyc
            test_reciprocity.cpython-311.pyc
            test regular.cpython-311.pyc
            test_richclub.cpython-311.pyc
            test similarity.cpython-311.pyc
            test_simple_paths.cpython-311.pyc
            test smallworld.cpython-311.pyc
            test_smetric.cpython-311.pyc
            test_sparsifiers.cpython-311.pyc
            test structuralholes.cpython-311.pyc
            test_summarization.cpython-311.pyc
            test swap.cpython-311.pyc
            test_threshold.cpython-311.pyc
            test time dependent.cpython-311.pyc
            test_tournament.cpython-311.pyc
            test triads.cpython-311.pyc
            test_vitality.cpython-311.pyc
            test voronoi.cpython-311.pyc
            test_walks.cpython-311.pyc
            test wiener.cpython-311.pyc
            __init__.cpython-311.pyc
+---traversal
       beamsearch.py
       breadth_first_search.py
        depth_first_search.py
        edgebfs.py
        edgedfs.py
        init .py
   +---tests
      | test_beamsearch.py
  | | test bfs.py
```

```
test_dfs.py
            test_edgebfs.py
   test_edgedfs.py
   \--- pycache
                test_beamsearch.cpython-311.pyc
                test bfs.cpython-311.pyc
                test_dfs.cpython-311.pyc
                test_edgebfs.cpython-311.pyc
                test edgedfs.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            beamsearch.cpython-311.pyc
            {\tt breadth\_first\_search.cpython-311.pyc}
            depth_first_search.cpython-311.pyc
            edgebfs.cpython-311.pyc
            edgedfs.cpython-311.pyc
            __init__.cpython-311.pyc
+---tree
   branchings.py
        coding.py
        decomposition.py
        mst.py
        operations.py
        recognition.py
        __init__.py
-
   - 1
   +---tests
            test_branchings.py
   - 1
            test_coding.py
            test_decomposition.py
            test_mst.py
            test_operations.py
            test_recognition.py
            init .py
       \--- pycache
                test_branchings.cpython-311.pyc
                test_coding.cpython-311.pyc
                test_decomposition.cpython-311.pyc
                test_mst.cpython-311.pyc
                test operations.cpython-311.pyc
                test_recognition.cpython-311.pyc
                __init__.cpython-311.pyc
   \---__pycache__
            branchings.cpython-311.pyc
            coding.cpython-311.pyc
```

```
decomposition.cpython-311.pyc
            mst.cpython-311.pyc
            operations.cpython-311.pyc
            recognition.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        asteroidal.cpython-311.pyc
        boundary.cpython-311.pyc
        bridges.cpython-311.pyc
        broadcasting.cpython-311.pyc
        chains.cpython-311.pyc
        chordal.cpython-311.pyc
        clique.cpython-311.pyc
        cluster.cpython-311.pyc
        communicability_alg.cpython-311.pyc
        core.cpython-311.pyc
        covering.cpython-311.pyc
        cuts.cpython-311.pyc
        cycles.cpython-311.pyc
        dag.cpython-311.pyc
        distance_measures.cpython-311.pyc
        distance regular.cpython-311.pyc
        dominance.cpython-311.pyc
        dominating.cpython-311.pyc
        d_separation.cpython-311.pyc
        efficiency_measures.cpython-311.pyc
        euler.cpython-311.pyc
        graphical.cpython-311.pyc
        graph hashing.cpython-311.pyc
        hierarchy.cpython-311.pyc
        hybrid.cpython-311.pyc
        isolate.cpython-311.pyc
        link prediction.cpython-311.pyc
        lowest_common_ancestors.cpython-311.pyc
        matching.cpython-311.pyc
        mis.cpython-311.pyc
        moral.cpython-311.pyc
        node_classification.cpython-311.pyc
        non randomness.cpython-311.pyc
        planarity.cpython-311.pyc
        planar_drawing.cpython-311.pyc
        polynomials.cpython-311.pyc
        reciprocity.cpython-311.pyc
        regular.cpython-311.pyc
        richclub.cpython-311.pyc
        similarity.cpython-311.pyc
        simple_paths.cpython-311.pyc
        smallworld.cpython-311.pyc
        smetric.cpython-311.pyc
        sparsifiers.cpython-311.pyc
```

```
structuralholes.cpython-311.pyc
            summarization.cpython-311.pyc
            swap.cpython-311.pyc
            threshold.cpython-311.pyc
            time_dependent.cpython-311.pyc
            tournament.cpython-311.pyc
            triads.cpython-311.pyc
            vitality.cpython-311.pyc
            voronoi.cpython-311.pyc
            walks.cpython-311.pyc
            wiener.cpython-311.pyc
            __init__.cpython-311.pyc
+---classes
       coreviews.py
       digraph.py
        filters.py
        function.py
       graph.py
       graphviews.py
       multidigraph.py
       multigraph.py
        reportviews.py
       __init__.py
   +---tests
           dispatch_interface.py
           historical tests.py
            test_coreviews.py
           test digraph.py
           test_digraph_historical.py
            test filters.py
            test_function.py
            test_graph.py
            test_graphviews.py
            test_graph_historical.py
           test_multidigraph.py
            test multigraph.py
            test_reportviews.py
            test special.py
           test_subgraphviews.py
            __init__.py
   -
       - 1
       \---_pycache_
                dispatch interface.cpython-311.pyc
                historical_tests.cpython-311.pyc
                test_coreviews.cpython-311.pyc
                test_digraph.cpython-311.pyc
                test_digraph_historical.cpython-311.pyc
                test_filters.cpython-311.pyc
                test function.cpython-311.pyc
```

```
test_graph.cpython-311.pyc
                    test graphviews.cpython-311.pyc
                    test_graph_historical.cpython-311.pyc
                    test multidigraph.cpython-311.pyc
                    test_multigraph.cpython-311.pyc
                    test reportviews.cpython-311.pyc
                    test_special.cpython-311.pyc
                    test subgraphviews.cpython-311.pyc
                    __init__.cpython-311.pyc
        \---__pycache__
                coreviews.cpython-311.pyc
                digraph.cpython-311.pyc
                filters.cpython-311.pyc
                function.cpython-311.pyc
                graph.cpython-311.pyc
                graphviews.cpython-311.pyc
                multidigraph.cpython-311.pyc
                multigraph.cpython-311.pyc
                reportviews.cpython-311.pyc
                init .cpython-311.pyc
    +---drawing
           layout.py
            nx agraph.py
           nx_latex.py
            nx_pydot.py
           nx pylab.py
            __init__.py
        1
        +---tests
        1 1
                test_agraph.py
                test_latex.py
                test_layout.py
                test_pydot.py
                test pylab.py
                __init__.py
            +---baseline
                    test house with colors.png
            \---_pycache__
                    test_agraph.cpython-311.pyc
                    test_latex.cpython-311.pyc
                    test layout.cpython-311.pyc
                    test_pydot.cpython-311.pyc
                    test_pylab.cpython-311.pyc
                    __init__.cpython-311.pyc
-
        \---__pycache__
                layout.cpython-311.pyc
```

```
nx_agraph.cpython-311.pyc
           nx_latex.cpython-311.pyc
           nx_pydot.cpython-311.pyc
           nx pylab.cpython-311.pyc
            __init__.cpython-311.pyc
+---generators
        atlas.dat.gz
        atlas.py
        classic.py
        cographs.py
        community.py
        degree seq.py
        directed.py
        duplication.py
        ego.py
        expanders.py
        geometric.py
        harary_graph.py
        internet_as_graphs.py
        intersection.py
        interval_graph.py
        joint degree seq.py
        lattice.py
        line.py
        mycielski.py
        nonisomorphic_trees.py
        random clustered.py
        random_graphs.py
        small.py
        social.py
        spectral_graph_forge.py
        stochastic.py
        sudoku.py
        time_series.py
        trees.py
        triads.py
        init .py
   +---tests
           test_atlas.py
            test_classic.py
           test_cographs.py
            test_community.py
           test_degree_seq.py
   test_directed.py
            test_duplication.py
           test_ego.py
   test_expanders.py
           test_geometric.py
           test_harary_graph.py
```

```
test_internet_as_graphs.py
        test intersection.py
        test_interval_graph.py
    -
        test_joint_degree_seq.py
        test_lattice.py
        test line.py
        test_mycielski.py
        test nonisomorphic trees.py
        test_random_clustered.py
        test_random_graphs.py
        test small.py
1
    1
        test_spectral_graph_forge.py
        test stochastic.py
        test_sudoku.py
        test time series.py
        test_trees.py
        test triads.py
        __init__.py
    \---_pycache_
            test atlas.cpython-311.pyc
            test_classic.cpython-311.pyc
            test cographs.cpython-311.pyc
            test_community.cpython-311.pyc
            test degree seq.cpython-311.pyc
            test_directed.cpython-311.pyc
            test_duplication.cpython-311.pyc
            test ego.cpython-311.pyc
            test_expanders.cpython-311.pyc
            test geometric.cpython-311.pyc
            test_harary_graph.cpython-311.pyc
            test_internet_as_graphs.cpython-311.pyc
            test_intersection.cpython-311.pyc
            test interval graph.cpython-311.pyc
            test_joint_degree_seq.cpython-311.pyc
            test lattice.cpython-311.pyc
            test_line.cpython-311.pyc
            test mycielski.cpython-311.pyc
            test_nonisomorphic_trees.cpython-311.pyc
            test random clustered.cpython-311.pyc
            test_random_graphs.cpython-311.pyc
            test_small.cpython-311.pyc
            test_spectral_graph_forge.cpython-311.pyc
            test_stochastic.cpython-311.pyc
            test sudoku.cpython-311.pyc
            test_time_series.cpython-311.pyc
            test_trees.cpython-311.pyc
            test_triads.cpython-311.pyc
            init .cpython-311.pyc
\---_pycache__
```

```
atlas.cpython-311.pyc
           classic.cpython-311.pyc
           cographs.cpython-311.pyc
           community.cpython-311.pyc
           degree_seq.cpython-311.pyc
           directed.cpython-311.pyc
           duplication.cpython-311.pyc
           ego.cpython-311.pyc
           expanders.cpython-311.pyc
           geometric.cpython-311.pyc
           harary graph.cpython-311.pyc
           internet_as_graphs.cpython-311.pyc
           intersection.cpython-311.pyc
           interval_graph.cpython-311.pyc
           joint degree seq.cpython-311.pyc
           lattice.cpython-311.pyc
           line.cpython-311.pyc
           mycielski.cpython-311.pyc
           nonisomorphic trees.cpython-311.pyc
           random_clustered.cpython-311.pyc
            random graphs.cpython-311.pyc
           small.cpython-311.pyc
           social.cpython-311.pyc
           spectral_graph_forge.cpython-311.pyc
           stochastic.cpython-311.pyc
           sudoku.cpython-311.pyc
           time_series.cpython-311.pyc
           trees.cpython-311.pyc
           triads.cpython-311.pyc
            init .cpython-311.pyc
+---linalg
       algebraicconnectivity.py
       attrmatrix.py
       bethehessianmatrix.py
       graphmatrix.py
       laplacianmatrix.py
       modularitymatrix.py
       spectrum.py
        init .py
   +---tests
           test_algebraic_connectivity.py
           test_attrmatrix.py
           test bethehessian.py
           test_graphmatrix.py
           test_laplacian.py
           test_modularity.py
   1
           test spectrum.py
           __init__.py
```

```
\---_pycache_
               test algebraic connectivity.cpython-311.pyc
               test_attrmatrix.cpython-311.pyc
               test bethehessian.cpython-311.pyc
               test_graphmatrix.cpython-311.pyc
               test laplacian.cpython-311.pyc
               test_modularity.cpython-311.pyc
               test spectrum.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
           algebraicconnectivity.cpython-311.pyc
           attrmatrix.cpython-311.pyc
           \verb|bethehessianmatrix.cpython-311.pyc|
           graphmatrix.cpython-311.pyc
           laplacianmatrix.cpython-311.pyc
           modularitymatrix.cpython-311.pyc
           spectrum.cpython-311.pyc
            __init__.cpython-311.pyc
+---readwrite
       adjlist.py
       edgelist.py
       gexf.py
       gml.py
       graph6.py
       graphml.py
       leda.py
       multiline_adjlist.py
       p2g.py
       pajek.py
       sparse6.py
       text.py
        init .py
   +---json graph
          adjacency.py
           cytoscape.py
           node_link.py
           tree.py
           __init__.py
      +---tests
         | test_adjacency.py
              test cytoscape.py
               test_node_link.py
               test_tree.py
               __init__.py
   | \---__pycache__
                   test adjacency.cpython-311.pyc
```

```
test_cytoscape.cpython-311.pyc
                test_node_link.cpython-311.pyc
               test_tree.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
           adjacency.cpython-311.pyc
            cytoscape.cpython-311.pyc
           node_link.cpython-311.pyc
            tree.cpython-311.pyc
            __init__.cpython-311.pyc
+---tests
        test_adjlist.py
        test edgelist.py
        test_gexf.py
        test_gml.py
        test_graph6.py
        test graphml.py
       test_leda.py
        test p2g.py
        test_pajek.py
        test sparse6.py
        test_text.py
        init .py
   \---_pycache__
           test adjlist.cpython-311.pyc
            test_edgelist.cpython-311.pyc
            test gexf.cpython-311.pyc
            test_gml.cpython-311.pyc
            test_graph6.cpython-311.pyc
            test_graphml.cpython-311.pyc
            test leda.cpython-311.pyc
            test_p2g.cpython-311.pyc
            test pajek.cpython-311.pyc
            test_sparse6.cpython-311.pyc
            test text.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        adjlist.cpython-311.pyc
        edgelist.cpython-311.pyc
        gexf.cpython-311.pyc
        gml.cpython-311.pyc
        graph6.cpython-311.pyc
        graphml.cpython-311.pyc
        leda.cpython-311.pyc
        multiline adjlist.cpython-311.pyc
       p2g.cpython-311.pyc
       pajek.cpython-311.pyc
```

```
sparse6.cpython-311.pyc
                           text.cpython-311.pyc
                           __init__.cpython-311.pyc
               +---tests
                       test all random functions.py
                   test_convert.py
                       test convert numpy.py
                       test_convert_pandas.py
                       test_convert_scipy.py
                       test exceptions.py
                       test_import.py
                       test_lazy_imports.py
                       test_relabel.py
                       init .py
                   \---_pycache__
                           test_all_random_functions.cpython-311.pyc
                           test convert.cpython-311.pyc
                           test_convert_numpy.cpython-311.pyc
                           test convert pandas.cpython-311.pyc
                           test_convert_scipy.cpython-311.pyc
                           test exceptions.cpython-311.pyc
                           test_import.cpython-311.pyc
                           test lazy imports.cpython-311.pyc
                           test_relabel.cpython-311.pyc
                           __init__.cpython-311.pyc
               +---utils
                       backends.py
                       configs.py
                       decorators.py
                       heaps.py
                       mapped_queue.py
                       misc.py
                       random sequence.py
                       rcm.py
                       union find.py
                       __init__.py
                   +---tests
                           test_backends.py
                       test_config.py
                           test_decorators.py
                           test heaps.py
                       test_mapped_queue.py
ı
                           test_misc.py
                           test_random_sequence.py
                   test rcm.py
                           test_unionfind.py
                  test init.py
```

```
\---_pycache_
                   test backends.cpython-311.pyc
                   test_config.cpython-311.pyc
                   test decorators.cpython-311.pyc
                   test_heaps.cpython-311.pyc
                   test mapped queue.cpython-311.pyc
                   test_misc.cpython-311.pyc
                   test_random_sequence.cpython-311.pyc
                   test rcm.cpython-311.pyc
                   test_unionfind.cpython-311.pyc
                   test init.cpython-311.pyc
                   __init__.cpython-311.pyc
        \---_pycache__
               backends.cpython-311.pyc
               configs.cpython-311.pyc
               decorators.cpython-311.pyc
               heaps.cpython-311.pyc
               mapped queue.cpython-311.pyc
               misc.cpython-311.pyc
               random sequence.cpython-311.pyc
               rcm.cpython-311.pyc
               union find.cpython-311.pyc
               __init__.cpython-311.pyc
    \---_pycache_
           conftest.cpython-311.pyc
           convert.cpython-311.pyc
           convert_matrix.cpython-311.pyc
           exception.cpython-311.pyc
           lazy_imports.cpython-311.pyc
           relabel.cpython-311.pyc
            __init__.cpython-311.pyc
+---networkx-3.3.dist-info
       entry points.txt
       INSTALLER
       LICENSE.txt
       METADATA
        RECORD
       top_level.txt
        WHEEL
+---numpy
       conftest.py
       ctypeslib.py
ctypeslib.pyi
       dtypes.py
       dtypes.pyi
```

```
| exceptions.py
| | exceptions.pyi
       | | matlib.py
            py.typed
1 1
       | | version.py
I
       | | version.pyi
            _array_api_info.py
       1 1
            _array_api_info.pyi
        | configtool.py
       _distributor_init.py
       1 1
       1
            _expired_attrs_2_0.py
            _globals.py
Ī
       1 1
           pytesttester.py
       | pytesttester.pyi
       __config__.py
1
       | __init__.cython-30.pxd
         | __init__.pxd
I
       __init__.pyi
1
       | +---char
       1
       1 1 1
         | \---_pycache__
                __init__.cpython-311.pyc
ı
       | +---compat
       | | py3k.py
         1
       1 1
           | | +---tests
I
       __init__.cpython-311.pyc
1 1 1
       | \---__pycache__
                py3k.cpython-311.pyc
1
                  init .cpython-311.pyc
| +---core
       | | arrayprint.py
         | | defchararray.py
1
            | einsumfunc.py
       | | fromnumeric.py
I
           | function_base.py
       | | getlimits.py
I
       | | multiarray.py
  | | numeric.py
      | | numerictypes.py
```

```
overrides.py
       records.py
       shape_base.py
       umath.py
       _dtype.py
       _dtype_ctypes.py
       _internal.py
       multiarray umath.py
       _utils.py
       __init__.py
        __init__.pyi
   \--- pycache
           arrayprint.cpython-311.pyc
            defchararray.cpython-311.pyc
           einsumfunc.cpython-311.pyc
            fromnumeric.cpython-311.pyc
            function_base.cpython-311.pyc
            getlimits.cpython-311.pyc
           multiarray.cpython-311.pyc
            numeric.cpython-311.pyc
           numerictypes.cpython-311.pyc
            overrides.cpython-311.pyc
            records.cpython-311.pyc
            shape base.cpython-311.pyc
           umath.cpython-311.pyc
            _dtype.cpython-311.pyc
            _dtype_ctypes.cpython-311.pyc
            _internal.cpython-311.pyc
            multiarray umath.cpython-311.pyc
            _utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---distutils
       armccompiler.py
       ccompiler.py
       ccompiler_opt.py
       conv template.py
       core.py
        cpuinfo.py
       exec_command.py
        extension.py
       from_template.py
        fujitsuccompiler.py
       intelccompiler.py
       lib2def.py
       line endings.py
       log.py
       mingw32ccompiler.py
       misc_util.py
       msvc9compiler.py
```

```
msvccompiler.py
    npy_pkg_config.py
    numpy_distribution.py
    pathccompiler.py
    system_info.py
    unixccompiler.py
    _shell_utils.py
    __init__.py
    __init__.pyi
+---checks
        cpu_asimd.c
        cpu asimddp.c
        cpu_asimdfhm.c
        cpu asimdhp.c
        cpu_avx.c
        cpu_avx2.c
        cpu_avx512cd.c
        cpu avx512f.c
        cpu_avx512_clx.c
        cpu_avx512_cnl.c
        cpu_avx512_icl.c
        cpu_avx512_knl.c
        cpu_avx512_knm.c
        cpu avx512 skx.c
        cpu_avx512_spr.c
        cpu_f16c.c
        cpu fma3.c
        cpu_fma4.c
        cpu neon.c
        cpu_neon_fp16.c
        cpu_neon_vfpv4.c
        cpu_popcnt.c
        cpu_rvv.c
        cpu_sse.c
        cpu_sse2.c
        cpu_sse3.c
        cpu sse41.c
        cpu_sse42.c
        cpu ssse3.c
        cpu_sve.c
        cpu_vsx.c
        cpu_vsx2.c
        cpu_vsx3.c
        cpu_vsx4.c
        cpu_vx.c
        cpu_vxe.c
        cpu_vxe2.c
-
        cpu_xop.c
        extra_avx512bw_mask.c
        extra avx512dq mask.c
```

```
extra_avx512f_reduce.c
        extra_vsx3_half_double.c
        extra_vsx4_mma.c
        extra_vsx_asm.c
        test_flags.c
+---command
        autodist.py
        bdist_rpm.py
        build.py
        build clib.py
        build_ext.py
        build py.py
        build_scripts.py
        build src.py
        config.py
        config_compiler.py
        develop.py
        egg_info.py
        install.py
        install clib.py
        install_data.py
        install headers.py
        sdist.py
        init .py
    \---__pycache__
            autodist.cpython-311.pyc
            bdist_rpm.cpython-311.pyc
            build.cpython-311.pyc
            build_clib.cpython-311.pyc
            build ext.cpython-311.pyc
            build_py.cpython-311.pyc
            build scripts.cpython-311.pyc
            build_src.cpython-311.pyc
            config.cpython-311.pyc
            config_compiler.cpython-311.pyc
            develop.cpython-311.pyc
            egg_info.cpython-311.pyc
            install.cpython-311.pyc
            install_clib.cpython-311.pyc
            install_data.cpython-311.pyc
            install_headers.cpython-311.pyc
            sdist.cpython-311.pyc
            __init__.cpython-311.pyc
+---fcompiler
        absoft.py
        arm.py
        compaq.py
        environment.py
```

```
fujitsu.py
                            g95.py
                            gnu.py
                        hpux.py
                            ibm.py
                            intel.py
                            lahey.py
                            mips.py
                            nag.py
                            none.py
                   1
                            nv.py
                            pathf95.py
                            pg.py
                            sun.py
                            vast.py
                            __init__.py
ı
                        \---__pycache__
                                absoft.cpython-311.pyc
                                arm.cpython-311.pyc
                                compaq.cpython-311.pyc
                                environment.cpython-311.pyc
                                fujitsu.cpython-311.pyc
                                g95.cpython-311.pyc
                                gnu.cpython-311.pyc
                                hpux.cpython-311.pyc
                                ibm.cpython-311.pyc
                                intel.cpython-311.pyc
                                lahey.cpython-311.pyc
                                mips.cpython-311.pyc
                                nag.cpython-311.pyc
                                none.cpython-311.pyc
                                nv.cpython-311.pyc
                                pathf95.cpython-311.pyc
                                pg.cpython-311.pyc
                                sun.cpython-311.pyc
                                vast.cpython-311.pyc
                                __init__.cpython-311.pyc
                    +---mingw
                            gfortran_vs2003_hack.c
                   +---tests
                            test_build_ext.py
                            test_ccompiler_opt.py
                            test_ccompiler_opt_conf.py
ı
                            test_exec_command.py
                            test_fcompiler.py
                   test_fcompiler_gnu.py
                            test_fcompiler_intel.py
                            test fcompiler nagfor.py
```

```
test_from_template.py
        test log.py
        test_mingw32ccompiler.py
        test misc util.py
        test_npy_pkg_config.py
        test shell utils.py
        test_system_info.py
        utilities.py
        __init__.py
   \---_pycache_
            test_build_ext.cpython-311.pyc
            test ccompiler opt.cpython-311.pyc
            test_ccompiler_opt_conf.cpython-311.pyc
            test exec command.cpython-311.pyc
            test_fcompiler.cpython-311.pyc
            test_fcompiler_gnu.cpython-311.pyc
            test_fcompiler_intel.cpython-311.pyc
            test fcompiler nagfor.cpython-311.pyc
            test_from_template.cpython-311.pyc
            test log.cpython-311.pyc
            test_mingw32ccompiler.cpython-311.pyc
            test misc util.cpython-311.pyc
            test_npy_pkg_config.cpython-311.pyc
            test shell utils.cpython-311.pyc
            test_system_info.cpython-311.pyc
           utilities.cpython-311.pyc
            init .cpython-311.pyc
\--- pycache
        armccompiler.cpython-311.pyc
        ccompiler.cpython-311.pyc
        ccompiler_opt.cpython-311.pyc
        conv template.cpython-311.pyc
        core.cpython-311.pyc
        cpuinfo.cpython-311.pyc
        exec_command.cpython-311.pyc
        extension.cpython-311.pyc
        from_template.cpython-311.pyc
        fujitsuccompiler.cpython-311.pyc
        intelccompiler.cpython-311.pyc
        lib2def.cpython-311.pyc
        line_endings.cpython-311.pyc
        log.cpython-311.pyc
        mingw32ccompiler.cpython-311.pyc
        misc_util.cpython-311.pyc
        msvc9compiler.cpython-311.pyc
        msvccompiler.cpython-311.pyc
        npy pkg config.cpython-311.pyc
        numpy_distribution.cpython-311.pyc
        pathccompiler.cpython-311.pyc
```

```
system_info.cpython-311.pyc
                           unixccompiler.cpython-311.pyc
                           _shell_utils.cpython-311.pyc
                           __init__.cpython-311.pyc
               +---doc
                   | ufuncs.py
                   \---__pycache__
                           ufuncs.cpython-311.pyc
               +---f2py
                   - 1
                       auxfuncs.py
                       capi_maps.py
                       cb rules.py
                       cfuncs.py
                       common_rules.py
                       crackfortran.py
                       diagnose.py
                       f2py2e.py
                       f90mod rules.py
                       func2subr.py
                       rules.py
                       setup.cfg
                       symbolic.py
                       use_rules.py
                       _isocbind.py
                       _src_pyf.py
                       __init__.py
                       __init__.pyi
                       __main__.py
                       __version__.py
                   +---src
                           fortranobject.c
                           fortranobject.h
                   +---tests
                      test_abstract_interface.py
                           test_array_from_pyobj.py
                           test_assumed_shape.py
                           test_block_docstring.py
                           test_callback.py
                           test_character.py
                           test common.py
                           test_crackfortran.py
ı
                           test_data.py
                           test_docs.py
                   1
                       test_f2cmap.py
                           test_f2py2e.py
                           test_isoc.py
```

```
test_kind.py
                           test_mixed.py
                      test_modules.py
                           test parameter.py
test_pyf_src.py
                           test_quoted_character.py
                           test_regression.py
                           test return character.py
                           test_return_complex.py
1
                           test_return_integer.py
                           test_return_logical.py
                       1
                           test_return_real.py
                           test semicolon split.py
ī
                           test_size.py
                           test string.py
                           test_symbolic.py
                           test_value_attrspec.py
Ī
                           util.py
                           __init__.py
                   1
1
                       +---src
                           +---abstract_interface
1
                                   foo.f90
                                   gh18403_mod.f90
                           +---array_from_pyobj
                                   wrapmodule.c
ı
                           +---assumed_shape
                                   .f2py_f2cmap
                       1
                          - 1
                                   foo_free.f90
                                   foo mod.f90
ı
                                   foo_use.f90
                                   precision.f90
                           +---block_docstring
1
                                   foo.f
                          +---callback
                                   foo.f
                                   gh17797.f90
1
                                   gh18335.f90
                                   gh25211.f
                                   gh25211.pyf
                          +---cli
Ī
                                   gh_22819.pyf
                                   hi77.f
                       hiworld.f90
                      | +---common
```

```
block.f
                                    gh19161.f90
                            +---crackfortran
                                    accesstype.f90
                                    data common.f
                                    data_multiplier.f
                                    data stmts.f90
                                    data_with_comments.f
                                    foo_deps.f90
                                    gh15035.f
                                    gh17859.f
                                    gh22648.pyf
                                    gh23533.f
                                    gh23598.f90
                                    gh23598Warn.f90
                                    gh23879.f90
                                    gh2848.f90
                                    operators.f90
                                    privatemod.f90
                                    publicmod.f90
                                    pubprivmod.f90
                                    unicode comment.f90
                            +---f2cmap
                                    .f2py_f2cmap
                                    isoFortranEnvMap.f90
                            +---isocintrin
                                    isoCtests.f90
                                    foo.f90
                            +---mixed
                                    foo.f
                                    foo_fixed.f90
                                    foo free.f90
                            +---modules
                                    module_data_docstring.f90
                                    use_modules.f90
                                +---gh25337
                                        data.f90
                                        use_data.f90
Ī
                                \---gh26920
                                        two_mods_with_no_public_entities.f90
                                        two_mods_with_one_public_routine.f90
```

```
| +---negative_bounds
                                   issue 20853.f90
                       +---parameter
                                   constant_array.f90
                                   constant both.f90
                                   constant_compound.f90
                                   constant integer.f90
                                   constant_non_compound.f90
                                   constant_real.f90
                           +---quoted_character
                                    foo.f
                           +---regression
                                   AB.inc
                                   f77comments.f
ı
                                   f77fixedform.f95
                                    f90continuation.f90
                                   incfile.f90
                                    inout.f90
                           +---return character
                                   foo77.f
                                    foo90.f90
                           +---return_complex
                                    foo77.f
ī
                                    foo90.f90
                           +---return_integer
                                    foo77.f
                                    foo90.f90
                           +---return_logical
                                    foo77.f
                                    foo90.f90
                           +---return_real
                                    foo77.f
                                    foo90.f90
                           +---size
                                    foo.f90
                           +---string
Ī
                                   char.f90
                                   fixed_string.f90
                                   gh24008.f
                                   gh24662.f90
                                   gh25286.f90
```

```
gh25286.pyf
                gh25286 bc.pyf
                scalar_string.f90
                string.f
        \---value attrspec
                gh21665.f90
    \---_pycache_
            test_abstract_interface.cpython-311.pyc
            test_array_from_pyobj.cpython-311.pyc
            test_assumed_shape.cpython-311.pyc
            test block docstring.cpython-311.pyc
            test_callback.cpython-311.pyc
            test character.cpython-311.pyc
            test_common.cpython-311.pyc
            test crackfortran.cpython-311.pyc
            test_data.cpython-311.pyc
            test docs.cpython-311.pyc
            test_f2cmap.cpython-311.pyc
            test f2py2e.cpython-311.pyc
            test_isoc.cpython-311.pyc
            test kind.cpython-311.pyc
            test_mixed.cpython-311.pyc
            test_modules.cpython-311.pyc
            test_parameter.cpython-311.pyc
            test_pyf_src.cpython-311.pyc
            test quoted character.cpython-311.pyc
            test_regression.cpython-311.pyc
            test return character.cpython-311.pyc
            test_return_complex.cpython-311.pyc
            test_return_integer.cpython-311.pyc
            test_return_logical.cpython-311.pyc
            test return real.cpython-311.pyc
            test_semicolon_split.cpython-311.pyc
            test size.cpython-311.pyc
            test_string.cpython-311.pyc
            test symbolic.cpython-311.pyc
            test_value_attrspec.cpython-311.pyc
            util.cpython-311.pyc
            __init__.cpython-311.pyc
+--- backends
        meson.build.template
        backend.py
        _distutils.py
        meson.py
        __init__.py
\---_pycache_
            backend.cpython-311.pyc
```

```
_distutils.cpython-311.pyc
               meson.cpython-311.pyc
               __init__.cpython-311.pyc
   \---_pycache__
           auxfuncs.cpython-311.pyc
           capi_maps.cpython-311.pyc
           cb rules.cpython-311.pyc
           cfuncs.cpython-311.pyc
           common_rules.cpython-311.pyc
           crackfortran.cpython-311.pyc
           diagnose.cpython-311.pyc
           f2py2e.cpython-311.pyc
           f90mod_rules.cpython-311.pyc
           func2subr.cpython-311.pyc
           rules.cpython-311.pyc
           symbolic.cpython-311.pyc
           use_rules.cpython-311.pyc
           _isocbind.cpython-311.pyc
           _src_pyf.cpython-311.pyc
           init .cpython-311.pyc
           __main__.cpython-311.pyc
           version .cpython-311.pyc
+---fft
       helper.py
       _helper.py
       _helper.pyi
       _pocketfft.py
       pocketfft.pyi
       _pocketfft_umath.cp311-win_amd64.lib
       _pocketfft_umath.cp311-win_amd64.pyd
       __init__.py
       __init__.pyi
   +---tests
   | test_helper.py
           test pocketfft.py
           __init__.py
       \---__pycache__
               test_helper.cpython-311.pyc
               test_pocketfft.cpython-311.pyc
               __init__.cpython-311.pyc
   \---_pycache__
           helper.cpython-311.pyc
           _helper.cpython-311.pyc
           pocketfft.cpython-311.pyc
           __init__.cpython-311.pyc
```

```
+---lib
   -
       array_utils.py
   -
        array_utils.pyi
        format.py
        format.pyi
        introspect.py
        mixins.py
        mixins.pyi
        npyio.py
        npyio.pyi
        recfunctions.py
        scimath.py
        scimath.pyi
        stride_tricks.py
        stride_tricks.pyi
        user_array.py
        _arraypad_impl.py
        _arraypad_impl.pyi
        _arraysetops_impl.py
        _arraysetops_impl.pyi
        _arrayterator_impl.py
        _arrayterator_impl.pyi
        _array_utils_impl.py
        _array_utils_impl.pyi
        datasource.py
        _function_base_impl.py
        _function_base_impl.pyi
        _histograms_impl.py
        _histograms_impl.pyi
        index tricks impl.py
        _index_tricks_impl.pyi
        _iotools.py
        _nanfunctions_impl.py
        _nanfunctions_impl.pyi
        _npyio_impl.py
        _npyio_impl.pyi
        _polynomial_impl.py
        _polynomial_impl.pyi
        _scimath_impl.py
        _scimath_impl.pyi
        _shape_base_impl.py
        _shape_base_impl.pyi
        _stride_tricks_impl.py
        _stride_tricks_impl.pyi
        _twodim_base_impl.py
        _twodim_base_impl.pyi
        _type_check_impl.py
        _type_check_impl.pyi
        _ufunclike_impl.py
        _ufunclike_impl.pyi
        _user_array_impl.py
```

```
_utils_impl.py
                       _utils_impl.pyi
                       _version.py
                       _version.pyi
                       __init__.py
                        __init__.pyi
                    +---tests
                       test_arraypad.py
                            test_arraysetops.py
                            test_arrayterator.py
                            test_array_utils.py
                            test format.py
                            test_function_base.py
                            test histograms.py
                            test_index_tricks.py
                            test_io.py
                            test_loadtxt.py
                            test mixins.py
                            test_nanfunctions.py
                            test packbits.py
                            test_polynomial.py
                            test recfunctions.py
                            test_regression.py
                            test shape base.py
                            test_stride_tricks.py
                            test_twodim_base.py
                            test_type_check.py
                            test_ufunclike.py
                            test utils.py
                   1
                            test__datasource.py
                            test__iotools.py
                            test__version.py
                            init .py
                       +---data
                                py2-np0-objarr.npy
                                py2-objarr.npy
                                py2-objarr.npz
                                py3-objarr.npy
                                py3-objarr.npz
                                python3.npy
                                win64python2.npy
                       \--- pycache
                                test_arraypad.cpython-311.pyc
ı
                                test_arraysetops.cpython-311.pyc
                                test_arrayterator.cpython-311.pyc
                                test_array_utils.cpython-311.pyc
                                test_format.cpython-311.pyc
                                test function base.cpython-311.pyc
```

```
test_histograms.cpython-311.pyc
            test index tricks.cpython-311.pyc
            test_io.cpython-311.pyc
            test loadtxt.cpython-311.pyc
            test_mixins.cpython-311.pyc
            test nanfunctions.cpython-311.pyc
            test_packbits.cpython-311.pyc
            test polynomial.cpython-311.pyc
            test_recfunctions.cpython-311.pyc
            test_regression.cpython-311.pyc
            test_shape_base.cpython-311.pyc
            test_stride_tricks.cpython-311.pyc
            test twodim base.cpython-311.pyc
            test_type_check.cpython-311.pyc
            test ufunclike.cpython-311.pyc
            test_utils.cpython-311.pyc
            test datasource.cpython-311.pyc
            test__iotools.cpython-311.pyc
            test version.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        array utils.cpython-311.pyc
        format.cpython-311.pyc
        introspect.cpython-311.pyc
        mixins.cpython-311.pyc
        npyio.cpython-311.pyc
        recfunctions.cpython-311.pyc
        scimath.cpython-311.pyc
        stride tricks.cpython-311.pyc
        user_array.cpython-311.pyc
        arraypad impl.cpython-311.pyc
        _arraysetops_impl.cpython-311.pyc
        _arrayterator_impl.cpython-311.pyc
        _array_utils_impl.cpython-311.pyc
        datasource.cpython-311.pyc
        _function_base_impl.cpython-311.pyc
        histograms impl.cpython-311.pyc
        _index_tricks_impl.cpython-311.pyc
        iotools.cpython-311.pyc
        _nanfunctions_impl.cpython-311.pyc
        _npyio_impl.cpython-311.pyc
        _polynomial_impl.cpython-311.pyc
        _scimath_impl.cpython-311.pyc
        shape base impl.cpython-311.pyc
        _stride_tricks_impl.cpython-311.pyc
        _twodim_base_impl.cpython-311.pyc
        _type_check_impl.cpython-311.pyc
        ufunclike impl.cpython-311.pyc
        _user_array_impl.cpython-311.pyc
        utils impl.cpython-311.pyc
```

```
_version.cpython-311.pyc
              __init__.cpython-311.pyc
   +---linalg
| | lapack_lite.cp311-win_amd64.lib
          lapack lite.cp311-win amd64.pyd
          linalg.py
          linalg.py
         _linalg.pyi
         _umath_linalg.cp311-win_amd64.lib
          _umath_linalg.cp311-win_amd64.pyd
          __init__.py
          __init__.pyi
      +---tests
   | | test_deprecations.py
       | | test_linalg.py
         | test_regression.py
              __init__.py
      | \---_pycache__
                  test_deprecations.cpython-311.pyc
                  test linalg.cpython-311.pyc
                  test_regression.cpython-311.pyc
                  init .cpython-311.pyc
      \---_pycache__
              linalg.cpython-311.pyc
              _linalg.cpython-311.pyc
              init .cpython-311.pyc
   +---ma
         API_CHANGES.txt
          core.py
          core.pyi
          extras.py
          extras.pyi
          LICENSE
          mrecords.py
          mrecords.pyi
          README.rst
          testutils.py
          timer_comparison.py
          __init__.py
           __init__.pyi
      +---tests
     | test_arrayobject.py
      | | test_core.py
      | test_deprecations.py
| | | test extras.py
```

```
test_mrecords.py
           test_old_ma.py
           test_regression.py
           test subclassing.py
           __init__.py
       \---__pycache__
                test arrayobject.cpython-311.pyc
                test_core.cpython-311.pyc
                test_deprecations.cpython-311.pyc
               test extras.cpython-311.pyc
               test_mrecords.cpython-311.pyc
               test old ma.cpython-311.pyc
               test_regression.cpython-311.pyc
               test subclassing.cpython-311.pyc
                __init__.cpython-311.pyc
   \---__pycache__
           core.cpython-311.pyc
           extras.cpython-311.pyc
           mrecords.cpython-311.pyc
           testutils.cpython-311.pyc
            timer comparison.cpython-311.pyc
            __init__.cpython-311.pyc
+---matrixlib
      defmatrix.py
       defmatrix.pyi
       __init__.py
       init .pyi
   +---tests
   | test_defmatrix.py
           test interaction.py
           test_masked_matrix.py
           test_matrix_linalg.py
           test_multiarray.py
           test numeric.py
           test_regression.py
            init .py
      - 1
       \---_pycache_
               test_defmatrix.cpython-311.pyc
                test_interaction.cpython-311.pyc
               test masked matrix.cpython-311.pyc
                test_matrix_linalg.cpython-311.pyc
               test_multiarray.cpython-311.pyc
                test_numeric.cpython-311.pyc
                test regression.cpython-311.pyc
                __init__.cpython-311.pyc
```

```
\---_pycache_
           defmatrix.cpython-311.pyc
            __init__.cpython-311.pyc
+---polynomial
       chebyshev.py
        chebyshev.pyi
       hermite.py
       hermite.pyi
       hermite_e.py
       hermite_e.pyi
       laguerre.py
        laguerre.pyi
        legendre.py
        legendre.pyi
       polynomial.py
       polynomial.pyi
       polyutils.py
       polyutils.pyi
        _polybase.py
       polybase.pyi
       _polytypes.pyi
       __init__.py
       __init__.pyi
   +---tests
           test_chebyshev.py
           test_classes.py
            test_hermite.py
           test hermite e.py
           test_laguerre.py
            test_legendre.py
           test_polynomial.py
           test_polyutils.py
           test_printing.py
            test_symbol.py
            __init__.py
       \---__pycache__
                test chebyshev.cpython-311.pyc
                test_classes.cpython-311.pyc
                test_hermite.cpython-311.pyc
                test_hermite_e.cpython-311.pyc
                test_laguerre.cpython-311.pyc
                test legendre.cpython-311.pyc
                test_polynomial.cpython-311.pyc
                test_polyutils.cpython-311.pyc
                test_printing.cpython-311.pyc
                test_symbol.cpython-311.pyc
                __init__.cpython-311.pyc
```

```
\---_pycache_
           chebyshev.cpython-311.pyc
           hermite.cpython-311.pyc
           hermite e.cpython-311.pyc
           laguerre.cpython-311.pyc
           legendre.cpython-311.pyc
           polynomial.cpython-311.pyc
           polyutils.cpython-311.pyc
            _polybase.cpython-311.pyc
            __init__.cpython-311.pyc
+---random
       bit generator.cp311-win amd64.lib
       bit_generator.cp311-win_amd64.pyd
       bit generator.pxd
       bit_generator.pyi
       c distributions.pxd
       LICENSE.md
       mtrand.cp311-win amd64.lib
       mtrand.cp311-win_amd64.pyd
       mtrand.pyi
       _bounded_integers.cp311-win_amd64.lib
       bounded integers.cp311-win amd64.pyd
       _bounded_integers.pxd
       common.cp311-win amd64.lib
       _common.cp311-win_amd64.pyd
       _common.pxd
       generator.cp311-win amd64.lib
       _generator.cp311-win_amd64.pyd
       generator.pyi
       _mt19937.cp311-win_amd64.lib
       _mt19937.cp311-win_amd64.pyd
       _mt19937.pyi
       pcg64.cp311-win amd64.lib
       _pcg64.cp311-win_amd64.pyd
       pcg64.pyi
       _philox.cp311-win_amd64.lib
       philox.cp311-win amd64.pyd
       _philox.pyi
       pickle.py
       _sfc64.cp311-win_amd64.lib
       _sfc64.cp311-win_amd64.pyd
       _sfc64.pyi
       __init__.pxd
       __init__.py
       __init__.pyi
   +---lib
   1
           npyrandom.lib
  +---tests
```

```
test_direct.py
       test extending.py
       test_generator_mt19937.py
  - 1
       test generator mt19937 regressions.py
       test_random.py
       test randomstate.py
       test_randomstate_regression.py
       test regression.py
       test_seed_sequence.py
       test_smoke.py
        __init__.py
   +---data
  | | generator_pcg64_np121.pkl.gz
           generator pcg64 np126.pkl.gz
           mt19937-testset-1.csv
           mt19937-testset-2.csv
           pcg64-testset-1.csv
           pcg64-testset-2.csv
           pcg64dxsm-testset-1.csv
           pcg64dxsm-testset-2.csv
           philox-testset-1.csv
           philox-testset-2.csv
           sfc64-testset-1.csv
           sfc64-testset-2.csv
           sfc64_np126.pkl.gz
           __init__.py
      \---__pycache__
                __init__.cpython-311.pyc
    \--- pycache
           test_direct.cpython-311.pyc
           test extending.cpython-311.pyc
           test_generator_mt19937.cpython-311.pyc
           test generator mt19937 regressions.cpython-311.pyc
           test_random.cpython-311.pyc
            test randomstate.cpython-311.pyc
           test_randomstate_regression.cpython-311.pyc
           test regression.cpython-311.pyc
           test_seed_sequence.cpython-311.pyc
           test_smoke.cpython-311.pyc
            __init__.cpython-311.pyc
+--- examples
  +---cffi
  | | extending.py
   | | parse.py
| \---_pycache_
               extending.cpython-311.pyc
```

```
| | | | parse.cpython-311.pyc
     | | +---cython
      | | | extending.pyx
      extending_distributions.pyx
               meson.build
     | | \---numba
      | | extending.py
             | extending_distributions.py
         - 1
             \---__pycache__
                 extending.cpython-311.pyc
                 extending_distributions.cpython-311.pyc
     1 1 1
     _pickle.cpython-311.pyc
I
              __init__.cpython-311.pyc
| +---rec
1 1 1
      | \---_pycache__
            init .cpython-311.pyc
     | +---strings
     | \---_pycache__
           __init__.cpython-311.pyc
1 1
     | +---testing
     | | overrides.py
      | | print_coercion_tables.py
1 1 1
     | | +---tests
     | | | test_utils.py
1
      1 1 1 1
       test utils.cpython-311.pyc
                __init__.cpython-311.pyc
| | | extbuild.py
     | | | utils.pyi
```

```
\---__pycache__
                  extbuild.cpython-311.pyc
                  utils.cpython-311.pyc
                  init .cpython-311.pyc
       \---__pycache__
              overrides.cpython-311.pyc
               print_coercion_tables.cpython-311.pyc
               __init__.cpython-311.pyc
   +---tests
          test_configtool.py
           test ctypeslib.py
           test_lazyloading.py
           test matlib.py
           test_numpy_config.py
           test_numpy_version.py
           test_public_api.py
           test reloading.py
           test_scripts.py
           test warnings.py
           test__all__.py
           init .py
       \---__pycache__
               test configtool.cpython-311.pyc
               test_ctypeslib.cpython-311.pyc
               test lazyloading.cpython-311.pyc
               test_matlib.cpython-311.pyc
               test_numpy_config.cpython-311.pyc
               test_numpy_version.cpython-311.pyc
               test_public_api.cpython-311.pyc
               test_reloading.cpython-311.pyc
               test scripts.cpython-311.pyc
               test_warnings.cpython-311.pyc
               test all .cpython-311.pyc
               __init__.cpython-311.pyc
   +---typing
      | mypy_plugin.py
       | __init__.py
       +---tests
      | test_isfile.py
       | test_runtime.py
              test_typing.py
               __init__.py
      1 1
      | | +---data
```

```
mypy.ini
+---fail
        arithmetic.pyi
        arrayprint.pyi
        arrayterator.pyi
        array_constructors.pyi
        array like.pyi
        array_pad.pyi
        bitwise_ops.pyi
        char.pyi
        chararray.pyi
        comparisons.pyi
        constants.pyi
        datasource.pyi
        dtype.pyi
        einsumfunc.pyi
        false_positives.pyi
        flatiter.pyi
        fromnumeric.pyi
        histograms.pyi
        index_tricks.pyi
        lib function base.pyi
        lib_polynomial.pyi
        lib utils.pyi
        lib_version.pyi
        linalg.pyi
        memmap.pyi
        modules.pyi
        multiarray.pyi
        ndarray.pyi
        ndarray_misc.pyi
        nditer.pyi
        nested_sequence.pyi
        npyio.pyi
        numerictypes.pyi
        random.pyi
        rec.pyi
        scalars.pyi
        shape.pyi
        shape_base.pyi
        stride_tricks.pyi
        strings.pyi
        testing.pyi
        twodim base.pyi
        type_check.pyi
        ufunclike.pyi
        ufuncs.pyi
        ufunc_config.pyi
        warnings_and_errors.pyi
```

```
+---misc
        extended precision.pyi
+---pass
        arithmetic.py
        arrayprint.py
        arrayterator.py
        array constructors.py
        array_like.py
        bitwise_ops.py
        comparisons.py
        dtype.py
        einsumfunc.py
        flatiter.py
        fromnumeric.py
        index_tricks.py
        lib utils.py
        lib_version.py
        literal.py
        ma.py
        mod.py
        modules.py
        multiarray.py
        ndarray_conversion.py
        ndarray misc.py
        ndarray_shape_manipulation.py
        numeric.py
        numerictypes.py
        random.py
        scalars.py
        shape.py
        simple.py
        simple_py3.py
        ufunclike.py
        ufuncs.py
        ufunc config.py
        warnings_and_errors.py
    \---_pycache__
            arithmetic.cpython-311.pyc
            arrayprint.cpython-311.pyc
            arrayterator.cpython-311.pyc
            array_constructors.cpython-311.pyc
            array_like.cpython-311.pyc
            bitwise ops.cpython-311.pyc
            comparisons.cpython-311.pyc
            dtype.cpython-311.pyc
            einsumfunc.cpython-311.pyc
            flatiter.cpython-311.pyc
            fromnumeric.cpython-311.pyc
            index tricks.cpython-311.pyc
```

```
lib_utils.cpython-311.pyc
            lib_version.cpython-311.pyc
            literal.cpython-311.pyc
            ma.cpython-311.pyc
            mod.cpython-311.pyc
            modules.cpython-311.pyc
            multiarray.cpython-311.pyc
            ndarray conversion.cpython-311.pyc
            ndarray_misc.cpython-311.pyc
            ndarray_shape_manipulation.cpython-311.pyc
            numeric.cpython-311.pyc
            numerictypes.cpython-311.pyc
            random.cpython-311.pyc
            scalars.cpython-311.pyc
            shape.cpython-311.pyc
            simple.cpython-311.pyc
            simple_py3.cpython-311.pyc
            ufunclike.cpython-311.pyc
            ufuncs.cpython-311.pyc
            ufunc_config.cpython-311.pyc
            warnings and errors.cpython-311.pyc
\---reveal
        arithmetic.pyi
        arraypad.pyi
        arrayprint.pyi
        arraysetops.pyi
        arrayterator.pyi
        array_api_info.pyi
        array constructors.pyi
       bitwise_ops.pyi
        char.pyi
        chararray.pyi
        comparisons.pyi
        constants.pyi
        ctypeslib.pyi
        datasource.pyi
        dtype.pyi
        einsumfunc.pyi
        emath.pyi
        false_positives.pyi
        fft.pyi
        flatiter.pyi
        fromnumeric.pyi
        getlimits.pyi
        histograms.pyi
        index_tricks.pyi
        lib_function_base.pyi
        lib polynomial.pyi
        lib_utils.pyi
        lib version.pyi
```

```
linalg.pyi
                    matrix.pyi
                    memmap.pyi
                    mod.pyi
                    modules.pyi
                    multiarray.pyi
                    nbit_base_example.pyi
                    ndarray conversion.pyi
                    ndarray_misc.pyi
                    ndarray_shape_manipulation.pyi
                    nditer.pyi
                    nested_sequence.pyi
                    npyio.pyi
                    numeric.pyi
                    numerictypes.pyi
                    polynomial_polybase.pyi
                    polynomial_polyutils.pyi
                    polynomial_series.pyi
                    random.pyi
                    rec.pyi
                    scalars.pyi
                    shape.pyi
                    shape base.pyi
                    stride_tricks.pyi
                    strings.pyi
                    testing.pyi
                    twodim_base.pyi
                    type check.pyi
                    ufunclike.pyi
                    ufuncs.pyi
                    ufunc_config.pyi
                    warnings_and_errors.pyi
       \---__pycache__
                test_isfile.cpython-311.pyc
                test runtime.cpython-311.pyc
                test_typing.cpython-311.pyc
                init .cpython-311.pyc
   \---_pycache__
           mypy_plugin.cpython-311.pyc
            __init__.cpython-311.pyc
+---_core
   1
       arrayprint.py
       arrayprint.pyi
       cversions.py
       defchararray.py
       defchararray.pyi
       einsumfunc.py
       einsumfunc.pyi
```

```
fromnumeric.py
fromnumeric.pyi
function_base.py
function base.pyi
getlimits.py
getlimits.pyi
memmap.py
memmap.pyi
multiarray.py
multiarray.pyi
numeric.py
numeric.pyi
numerictypes.py
numerictypes.pyi
overrides.py
printoptions.py
records.py
records.pyi
shape_base.py
shape_base.pyi
strings.py
strings.pyi
umath.py
_add_newdocs.py
add newdocs scalars.py
_asarray.py
_asarray.pyi
_dtype.py
_dtype_ctypes.py
exceptions.py
_internal.py
internal.pyi
_machar.py
methods.py
_multiarray_tests.cp311-win_amd64.lib
_multiarray_tests.cp311-win_amd64.pyd
_multiarray_umath.cp311-win_amd64.lib
_multiarray_umath.cp311-win_amd64.pyd
_operand_flag_tests.cp311-win_amd64.lib
operand flag tests.cp311-win amd64.pyd
_rational_tests.cp311-win_amd64.lib
_rational_tests.cp311-win_amd64.pyd
_simd.cp311-win_amd64.lib
_simd.cp311-win_amd64.pyd
string helpers.py
_struct_ufunc_tests.cp311-win_amd64.lib
_struct_ufunc_tests.cp311-win_amd64.pyd
_type_aliases.py
_type_aliases.pyi
_ufunc_config.py
ufunc config.pyi
```

```
_umath_tests.cp311-win_amd64.lib
    _umath_tests.cp311-win_amd64.pyd
    __init__.py
    __init__.pyi
+---include
    \---numpy
            arrayobject.h
            arrayscalars.h
        dtype_api.h
            halffloat.h
            ndarrayobject.h
            ndarraytypes.h
            npy_1_7_deprecated_api.h
            npy 2 compat.h
            npy_2_complexcompat.h
            npy_3kcompat.h
            npy_common.h
            npy_cpu.h
            npy_endian.h
            npy math.h
            npy_no_deprecated_api.h
            npy os.h
            numpyconfig.h
            ufuncobject.h
            utils.h
            _neighborhood_iterator_imp.h
            numpyconfig.h
            _public_dtype_api_table.h
            multiarray api.c
            __multiarray_api.h
            __ufunc_api.c
            __ufunc_api.h
        \---random
                bitgen.h
                distributions.h
                libdivide.h
                LICENSE.txt
+---lib
   | npymath.lib
    +---npy-pkg-config
            mlib.ini
            npymath.ini
    \---pkgconfig
-
            numpy.pc
+---tests
```

```
test_abc.py
                            test_api.py
                            test_argparse.py
                        -
                            test arraymethod.py
                            test_arrayobject.py
                            test arrayprint.py
                            test_array_api_info.py
                    1
                            test array coercion.py
                            test_array_interface.py
1
                            test_casting_floatingpoint_errors.py
                    1
                        ı
                            test_casting_unittests.py
                            test_conversion_utils.py
                            test cpu dispatcher.py
                            test_cpu_features.py
                            test custom dtypes.py
                            test_cython.py
                            test_datetime.py
ı
                            test_defchararray.py
                            test deprecations.py
                    test_dlpack.py
                            test dtype.py
                            test_einsum.py
                            test errstate.py
                            test_extint128.py
                            test function base.py
                            test_getlimits.py
                            test_half.py
                    test hashtable.py
ı
                            test_indexerrors.py
                            test indexing.py
                    1
                        ı
                            test_item_selection.py
                            test_limited_api.py
                            test_longdouble.py
                            test machar.py
                            test_memmap.py
                            test_mem_overlap.py
                            test_mem_policy.py
                    1
                            test multiarray.py
                            {\tt test\_multithreading.py}
                            test nditer.py
                            test_nep50_promotions.py
                        -
                            test_numeric.py
                            test_numerictypes.py
                            test_overrides.py
                            test print.py
                    1
                            test_protocols.py
ı
                            test records.py
                            test_regression.py
                    1
                            test scalarbuffer.py
                            test_scalarinherit.py
                            test scalarmath.py
```

```
test_scalarprint.py
    test_scalar_ctors.py
    test_scalar_methods.py
    test shape base.py
    test_simd.py
    test simd module.py
    test_stringdtype.py
    test strings.py
    test ufunc.py
    test_umath.py
    test_umath_accuracy.py
    test_umath_complex.py
    test unicode.py
    test_exceptions.py
    locales.py
    _natype.py
+---data
        astype copy.pkl
        generate_umath_validation_data.cpp
        recarray from file.fits
        umath-validation-set-arccos.csv
        umath-validation-set-arccosh.csv
        umath-validation-set-arcsin.csv
        umath-validation-set-arcsinh.csv
        umath-validation-set-arctan.csv
        umath-validation-set-arctanh.csv
        umath-validation-set-cbrt.csv
        umath-validation-set-cos.csv
        umath-validation-set-cosh.csv
        umath-validation-set-exp.csv
        umath-validation-set-exp2.csv
        umath-validation-set-expml.csv
        umath-validation-set-log.csv
        umath-validation-set-log10.csv
        umath-validation-set-log1p.csv
        umath-validation-set-log2.csv
        umath-validation-set-README.txt
        umath-validation-set-sin.csv
        umath-validation-set-sinh.csv
        umath-validation-set-tan.csv
        umath-validation-set-tanh.csv
+---examples
   +---cython
            checks.pyx
            meson.build
            setup.py
\---_pycache_
                setup.cpython-311.pyc
```

```
\---limited api
            limited_api1.c
            limited api2.pyx
            limited_api_latest.c
            meson.build
            setup.py
        \--- pycache
                setup.cpython-311.pyc
\---__pycache__
        test abc.cpython-311.pyc
        test_api.cpython-311.pyc
        test argparse.cpython-311.pyc
        test_arraymethod.cpython-311.pyc
        test arrayobject.cpython-311.pyc
        test_arrayprint.cpython-311.pyc
        test_array_api_info.cpython-311.pyc
        test_array_coercion.cpython-311.pyc
        test array interface.cpython-311.pyc
        test_casting_floatingpoint_errors.cpython-311.pyc
        test casting unittests.cpython-311.pyc
        test_conversion_utils.cpython-311.pyc
        test cpu dispatcher.cpython-311.pyc
        test_cpu_features.cpython-311.pyc
        test_custom_dtypes.cpython-311.pyc
        test cython.cpython-311.pyc
        test_datetime.cpython-311.pyc
        test defchararray.cpython-311.pyc
        test_deprecations.cpython-311.pyc
        test dlpack.cpython-311.pyc
        test_dtype.cpython-311.pyc
        test einsum.cpython-311.pyc
        test_errstate.cpython-311.pyc
        test extint128.cpython-311.pyc
        test_function_base.cpython-311.pyc
        test getlimits.cpython-311.pyc
        test_half.cpython-311.pyc
        test hashtable.cpython-311.pyc
        test_indexerrors.cpython-311.pyc
        test_indexing.cpython-311.pyc
        test_item_selection.cpython-311.pyc
        test_limited_api.cpython-311.pyc
        test longdouble.cpython-311.pyc
        test_machar.cpython-311.pyc
        test memmap.cpython-311.pyc
        test_mem_overlap.cpython-311.pyc
        test mem policy.cpython-311.pyc
        test_multiarray.cpython-311.pyc
        test multithreading.cpython-311.pyc
```

```
test_nditer.cpython-311.pyc
            test nep50 promotions.cpython-311.pyc
            test_numeric.cpython-311.pyc
            test numerictypes.cpython-311.pyc
            test_overrides.cpython-311.pyc
            test print.cpython-311.pyc
            test_protocols.cpython-311.pyc
            test records.cpython-311.pyc
            test regression.cpython-311.pyc
            test_scalarbuffer.cpython-311.pyc
            test scalarinherit.cpython-311.pyc
            test_scalarmath.cpython-311.pyc
            test scalarprint.cpython-311.pyc
            test_scalar_ctors.cpython-311.pyc
            test scalar methods.cpython-311.pyc
            test_shape_base.cpython-311.pyc
            test simd.cpython-311.pyc
            test_simd_module.cpython-311.pyc
            test stringdtype.cpython-311.pyc
            test_strings.cpython-311.pyc
            test ufunc.cpython-311.pyc
            test_umath.cpython-311.pyc
            test umath accuracy.cpython-311.pyc
            test_umath_complex.cpython-311.pyc
            test unicode.cpython-311.pyc
            test_exceptions.cpython-311.pyc
            _locales.cpython-311.pyc
            natype.cpython-311.pyc
\--- pycache
        arrayprint.cpython-311.pyc
        cversions.cpython-311.pyc
        defchararray.cpython-311.pyc
        einsumfunc.cpython-311.pyc
        fromnumeric.cpython-311.pyc
        function base.cpython-311.pyc
        getlimits.cpython-311.pyc
        memmap.cpython-311.pyc
        multiarray.cpython-311.pyc
        numeric.cpython-311.pyc
        numerictypes.cpython-311.pyc
        overrides.cpython-311.pyc
        printoptions.cpython-311.pyc
        records.cpython-311.pyc
        shape base.cpython-311.pyc
        strings.cpython-311.pyc
        umath.cpython-311.pyc
        _add_newdocs.cpython-311.pyc
        _add_newdocs_scalars.cpython-311.pyc
        _asarray.cpython-311.pyc
        dtype.cpython-311.pyc
```

```
_dtype_ctypes.cpython-311.pyc
           _exceptions.cpython-311.pyc
           _internal.cpython-311.pyc
            machar.cpython-311.pyc
           _methods.cpython-311.pyc
           string helpers.cpython-311.pyc
           _type_aliases.cpython-311.pyc
            ufunc config.cpython-311.pyc
            __init__.cpython-311.pyc
+---_pyinstaller
   | hook-numpy.py
        __init__.py
   +---tests
  | | pyinstaller-smoke.py
      test_pyinstaller.py
           __init__.py
      \---_pycache_
               pyinstaller-smoke.cpython-311.pyc
               test_pyinstaller.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache__
           hook-numpy.cpython-311.pyc
            __init__.cpython-311.pyc
+---_typing
       add docstring.py
       _array_like.py
      callable.pyi
      _char_codes.py
        _dtype_like.py
      _extended_precision.py
       nbit.py
        _nested_sequence.py
        scalars.py
        _shape.py
        ufunc.pyi
        __init__.py
   \---_pycache_
           _add_docstring.cpython-311.pyc
            _array_like.cpython-311.pyc
           _char_codes.cpython-311.pyc
           _dtype_like.cpython-311.pyc
           _extended_precision.cpython-311.pyc
           nbit.cpython-311.pyc
           _nested_sequence.cpython-311.pyc
            scalars.cpython-311.pyc
```

```
_shape.cpython-311.pyc
               __init__.cpython-311.pyc
   +---_utils
   | convertions.py
          inspect.py
           _pep440.py
           __init__.py
       \---_pycache_
               _convertions.cpython-311.pyc
               _inspect.cpython-311.pyc
               pep440.cpython-311.pyc
               __init__.cpython-311.pyc
   \---_pycache__
           conftest.cpython-311.pyc
           ctypeslib.cpython-311.pyc
           dtypes.cpython-311.pyc
           exceptions.cpython-311.pyc
           matlib.cpython-311.pyc
           version.cpython-311.pyc
           _array_api_info.cpython-311.pyc
           _configtool.cpython-311.pyc
           distributor init.cpython-311.pyc
           _expired_attrs_2_0.cpython-311.pyc
           _globals.cpython-311.pyc
           pytesttester.cpython-311.pyc
           __config__.cpython-311.pyc
            __init__.cpython-311.pyc
+---numpy-2.1.1.dist-info
       DELVEWHEEL
       entry_points.txt
       INSTALLER
       LICENSE.txt
       METADATA
       RECORD
       WHEEL
+---numpy.libs
       libscipy_openblas64_-c16e4918366c6bc1f1cd71e28ca36fc0.dll
       msvcp140-23ebcc0b37c8e3d074511f362feac48b.dll
+---openai
       pagination.py
     py.typed
      version.py
       _base_client.py
_client.py
1 1
       compat.py
```

```
_constants.py
 1 1
       _exceptions.py
 1 1
       _files.py
        _legacy_response.py
 _models.py
 _module_client.py
        _qs.py
       resource.py
       _response.py
        _streaming.py
        _types.py
 _version.py
        __init__.py
        __main__.py
 | +---cli
   | | _cli.py
       | _errors.py
           _models.py
          _progress.py
          utils.py
           __init__.py
   | +---_api
       | | audio.py
        | completions.py
             files.py
              image.py
              models.py
              main.py
              __init__.py
       | +---chat
          | completions.py
        | \---__pycache__
                    completions.cpython-311.pyc
                     __init__.cpython-311.pyc
           \---__pycache__
                  audio.cpython-311.pyc
                  completions.cpython-311.pyc
                  files.cpython-311.pyc
                 image.cpython-311.pyc
                 models.cpython-311.pyc
                  _main.cpython-311.pyc
                  __init__.cpython-311.pyc
 - 1
 | | | fine_tunes.py
```

```
| | | migrate.py
 | \---_pycache__
               fine tunes.cpython-311.pyc
                migrate.cpython-311.pyc
                main.cpython-311.pyc
                __init__.cpython-311.pyc
      \---__pycache__
             _cli.cpython-311.pyc
             errors.cpython-311.pyc
             _models.cpython-311.pyc
             progress.cpython-311.pyc
             _utils.cpython-311.pyc
             __init__.cpython-311.pyc
    +---helpers
 | | local_audio_player.py
    | | microphone.py
      | __init__.py
      \---__pycache__
            local audio player.cpython-311.pyc
             microphone.cpython-311.pyc
             __init__.cpython-311.pyc
  +---lib
 | | .keep
      | azure.py
      | _old_api.py
      | _pydantic.py
          _tools.py
       | _validators.py
          __init__.py
      +---streaming
      | | _assistants.py
       | | deltas.py
      | +---chat
      | | _completions.py
         | | _events.py
      | | _types.py
         | | __init__.py
      _completions.cpython-311.pyc
                   events.cpython-311.pyc
```

```
_types.cpython-311.pyc
                            __init__.cpython-311.pyc
           | +---responses
| | responses.py
                 | | _types.py
                        __init__.py
                 | \---_ pycache_
                            _events.cpython-311.pyc
                            _responses.cpython-311.pyc
                            _types.cpython-311.pyc
                            __init__.cpython-311.pyc
              | \---__pycache__
                        _assistants.cpython-311.pyc
                         _deltas.cpython-311.pyc
                         __init__.cpython-311.pyc
         | | +---_parsing
           | | _completions.py
                 | _responses.py
              1 1
                 \---__pycache__
                         _completions.cpython-311.pyc
                         responses.cpython-311.pyc
                         __init__.cpython-311.pyc
              - 1
            \---_pycache__
                    azure.cpython-311.pyc
                     _old_api.cpython-311.pyc
                      _pydantic.cpython-311.pyc
                     _tools.cpython-311.pyc
                      validators.cpython-311.pyc
                      __init__.cpython-311.pyc
           +---resources
           | | batches.py
              completions.py
                  embeddings.py
              | files.py
                  images.py
                  models.py
              | moderations.py
Ī
                  __init__.py
         | | | speech.py
```

```
| | | transcriptions.py
      | | | translations.py
      audio.cpython-311.pyc
                  speech.cpython-311.pyc
                  transcriptions.cpython-311.pyc
                  translations.cpython-311.pyc
                  __init__.cpython-311.pyc
          - 1
        - 1
          +---beta
        | | assistants.py
           | | beta.py
           | +---chat
Ī
          | | | chat.py
          | | completions.py
             chat.cpython-311.pyc
                    completions.cpython-311.pyc
                     init .cpython-311.pyc
          | +---realtime
Ī
          | | realtime.py
          | | sessions.py
           | | transcription sessions.py
          1 1 1
          realtime.cpython-311.pyc
                    sessions.cpython-311.pyc
                    transcription sessions.cpython-311.pyc
                    __init__.cpython-311.pyc
          | +---threads
           | | messages.py
          | | threads.py
             | | +---runs
             | | | runs.py
             | | steps.py
Ī
             runs.cpython-311.pyc
     steps.cpython-311.pyc
```

```
__init__.cpython-311.pyc
       messages.cpython-311.pyc
                      threads.cpython-311.pyc
                       __init__.cpython-311.pyc
           | \---__pycache__
                   assistants.cpython-311.pyc
                   beta.cpython-311.pyc
                    __init__.cpython-311.pyc
       | | +---chat
        | | | chat.py
           Ī
           | +---completions
           | | completions.py
           | | messages.py
           completions.cpython-311.pyc
                      messages.cpython-311.pyc
                       init .cpython-311.pyc
           | \---__pycache__
                  chat.cpython-311.pyc
                    __init__.cpython-311.pyc
           - 1
         | +---fine_tuning
       | | | fine_tuning.py
           | | checkpoints.py
           | | jobs.py
           | | \--- pycache
                      checkpoints.cpython-311.pyc
                      jobs.cpython-311.pyc
                       __init__.cpython-311.pyc
           | \---__pycache__
                   fine_tuning.cpython-311.pyc
1
                    __init__.cpython-311.pyc
       | +---responses
       | | | input_items.py
      | | | responses.py
```

```
| responses.py.orig
  | | init .py
  1 1
      \---__pycache__
               input_items.cpython-311.pyc
               responses.cpython-311.pyc
               __init__.cpython-311.pyc
    +---uploads
  | | parts.py
    | uploads.py
           __init__.py
      \---_pycache__
               parts.cpython-311.pyc
               uploads.cpython-311.pyc
               __init__.cpython-311.pyc
    +---vector stores
   | | files.py
         file batches.py
    | vector_stores.py
           __init__.py
      \--- pycache
               files.cpython-311.pyc
               file_batches.cpython-311.pyc
               vector stores.cpython-311.pyc
               __init__.cpython-311.pyc
    \---__pycache__
           batches.cpython-311.pyc
           completions.cpython-311.pyc
           embeddings.cpython-311.pyc
           files.cpython-311.pyc
           images.cpython-311.pyc
           models.cpython-311.pyc
           moderations.cpython-311.pyc
           __init__.cpython-311.pyc
+---types
       audio_model.py
       audio_response_format.py
       auto_file_chunking_strategy_param.py
       batch.py
       batch_create_params.py
       batch_error.py
       batch_list_params.py
   -
       batch_request_counts.py
       chat_model.py
       completion.py
```

```
completion_choice.py
    completion create params.py
    completion_usage.py
    create embedding response.py
    embedding.py
    embedding create params.py
    embedding_model.py
    file chunking strategy.py
    file_chunking_strategy_param.py
    file_content.py
    file_create_params.py
    file_deleted.py
    file list params.py
    file_object.py
    file purpose.py
    image.py
    images response.py
    image_create_variation_params.py
    image_edit_params.py
    image_generate_params.py
    image model.py
    model.py
    model deleted.py
    moderation.py
    moderation create params.py
    moderation_create_response.py
    moderation_image_url_input_param.py
    moderation model.py
    moderation_multi_modal_input_param.py
    moderation text input param.py
    other_file_chunking_strategy_object.py
    static_file_chunking_strategy.py
    static_file_chunking_strategy_object.py
    static_file_chunking_strategy_object_param.py
    static_file_chunking_strategy_param.py
    upload.py
    upload_complete_params.py
    upload create params.py
    vector_store.py
    vector store create params.py
    vector_store_deleted.py
    vector_store_list_params.py
    vector_store_search_params.py
    vector_store_search_response.py
    vector store update params.py
    websocket_connection_options.py
    init .py
+---audio
        speech_create_params.py
       speech model.py
```

```
transcription.py
        transcription create params.py
        transcription_create_response.py
        transcription include.py
        transcription_segment.py
        transcription stream event.py
        transcription_text_delta_event.py
        transcription text done event.py
        transcription_verbose.py
        transcription_word.py
        translation.py
1
        translation_create_params.py
        translation create response.py
        translation_verbose.py
        init .py
    \---_pycache_
            speech_create_params.cpython-311.pyc
            speech model.cpython-311.pyc
            transcription.cpython-311.pyc
            transcription create params.cpython-311.pyc
            transcription_create_response.cpython-311.pyc
            transcription include.cpython-311.pyc
            transcription_segment.cpython-311.pyc
            transcription stream event.cpython-311.pyc
            transcription_text_delta_event.cpython-311.pyc
            transcription_text_done_event.cpython-311.pyc
            transcription verbose.cpython-311.pyc
            transcription_word.cpython-311.pyc
            translation.cpython-311.pyc
            translation_create_params.cpython-311.pyc
            translation create response.cpython-311.pyc
            translation_verbose.cpython-311.pyc
            init .cpython-311.pyc
+---beta
        assistant.py
        assistant create params.py
        assistant_deleted.py
        assistant list params.py
        assistant_response_format_option.py
        assistant_response_format_option_param.py
        assistant_stream_event.py
        assistant_tool.py
        assistant tool choice.py
        assistant_tool_choice_function.py
        assistant_tool_choice_function_param.py
        assistant_tool_choice_option.py
        assistant tool choice option param.py
        assistant_tool_choice_param.py
        assistant tool param.py
```

```
assistant_update_params.py
       code interpreter tool.py
       code_interpreter_tool_param.py
   - 1
        file search tool.py
        file_search_tool_param.py
        function tool.py
        function_tool_param.py
        thread.py
        thread_create_and_run_params.py
        thread_create_params.py
        thread deleted.py
1
        thread_update_params.py
        init .py
- 1
   +---chat
  \---_pycache_
                __init__.cpython-311.pyc
    +---realtime
    1 1
           conversation_created_event.py
            conversation item.py
           conversation_item_content.py
            conversation item content param.py
           conversation_item_created_event.py
           conversation_item_create_event.py
           conversation item create event param.py
            conversation_item_deleted_event.py
       1
           conversation item delete event.py
    conversation_item_delete_event_param.py
            conversation item input audio transcription completed event.py
            conversation_item_input_audio_transcription_delta_event.py
            conversation item input audio transcription failed event.py
            conversation_item_param.py
            conversation item retrieve event.py
            conversation_item_retrieve_event_param.py
            conversation item truncated event.py
            conversation_item_truncate_event.py
            conversation item truncate event param.py
            conversation_item_with_reference.py
            conversation_item_with_reference_param.py
    1
            error_event.py
            input_audio_buffer_append_event.py
            input audio buffer append event param.py
            input_audio_buffer_cleared_event.py
    - 1
            input_audio_buffer_clear_event.py
            input_audio_buffer_clear_event_param.py
   input audio buffer committed event.py
           input_audio_buffer_commit_event.py
           input audio buffer commit event param.py
```

```
input_audio_buffer_speech_started_event.py
        input audio buffer speech stopped event.py
        rate_limits_updated_event.py
        realtime client event.py
        realtime_client_event_param.py
        realtime connect params.py
        realtime_response.py
        realtime response status.py
        realtime response usage.py
        realtime_server_event.py
        response audio delta event.py
        response_audio_done_event.py
        response audio transcript delta event.py
        response_audio_transcript_done_event.py
        response cancel event.py
        response_cancel_event_param.py
        response_content_part_added_event.py
        response_content_part_done_event.py
        response created event.py
        response_create_event.py
        response create event param.py
        response_done_event.py
        response function call arguments delta event.py
        response_function_call_arguments_done_event.py
        response output item added event.py
        response_output_item_done_event.py
        response_text_delta_event.py
        response text done event.py
        session.py
        session created event.py
        session_create_params.py
        session create response.py
        session_updated_event.py
        session update event.py
        session_update_event_param.py
        transcription session.py
        transcription_session_create_params.py
        transcription session update.py
        transcription_session_updated_event.py
        transcription session update param.py
        __init__.py
-
   \---__pycache__
            conversation_created_event.cpython-311.pyc
            conversation item.cpython-311.pyc
            conversation_item_content.cpython-311.pyc
            conversation_item_content_param.cpython-311.pyc
            conversation_item_created_event.cpython-311.pyc
            conversation item create event.cpython-311.pyc
            conversation_item_create_event_param.cpython-311.pyc
            conversation item deleted event.cpython-311.pyc
```

```
conversation_item_delete_event.cpython-311.pyc
conversation item delete event param.cpython-311.pyc
conversation_item_input_audio_transcription_completed_event.cpython-311.pyc
conversation item input audio transcription delta event.cpython-311.pyc
conversation_item_input_audio_transcription_failed_event.cpython-311.pyc
conversation item param.cpython-311.pyc
conversation_item_retrieve_event.cpython-311.pyc
conversation item retrieve event param.cpython-311.pyc
conversation item truncated event.cpython-311.pyc
conversation_item_truncate_event.cpython-311.pyc
conversation item truncate event param.cpython-311.pyc
conversation_item_with_reference.cpython-311.pyc
conversation item with reference param.cpython-311.pyc
error_event.cpython-311.pyc
input audio buffer append event.cpython-311.pyc
input_audio_buffer_append_event_param.cpython-311.pyc
input audio buffer cleared event.cpython-311.pyc
input_audio_buffer_clear_event.cpython-311.pyc
input audio buffer clear event param.cpython-311.pyc
input_audio_buffer_committed_event.cpython-311.pyc
input audio buffer commit event.cpython-311.pyc
input_audio_buffer_commit_event_param.cpython-311.pyc
input audio buffer speech started event.cpython-311.pyc
input_audio_buffer_speech_stopped_event.cpython-311.pyc
rate limits updated event.cpython-311.pyc
realtime_client_event.cpython-311.pyc
realtime_client_event_param.cpython-311.pyc
realtime connect params.cpython-311.pyc
realtime_response.cpython-311.pyc
realtime response status.cpython-311.pyc
realtime_response_usage.cpython-311.pyc
realtime server event.cpython-311.pyc
response_audio_delta_event.cpython-311.pyc
response audio done event.cpython-311.pyc
response_audio_transcript_delta_event.cpython-311.pyc
response audio transcript done event.cpython-311.pyc
response_cancel_event.cpython-311.pyc
response cancel event param.cpython-311.pyc
response_content_part_added_event.cpython-311.pyc
response content part done event.cpython-311.pyc
response_created_event.cpython-311.pyc
response_create_event.cpython-311.pyc
response_create_event_param.cpython-311.pyc
response_done_event.cpython-311.pyc
response function call arguments delta event.cpython-311.pyc
response_function_call_arguments_done_event.cpython-311.pyc
response_output_item_added_event.cpython-311.pyc
response_output_item_done_event.cpython-311.pyc
response text delta event.cpython-311.pyc
response_text_done_event.cpython-311.pyc
session.cpython-311.pyc
```

```
session_created_event.cpython-311.pyc
            session create params.cpython-311.pyc
            session_create_response.cpython-311.pyc
            session updated event.cpython-311.pyc
            session_update_event.cpython-311.pyc
            session update event param.cpython-311.pyc
            transcription_session.cpython-311.pyc
            transcription session create params.cpython-311.pyc
            transcription_session_update.cpython-311.pyc
            transcription_session_updated_event.cpython-311.pyc
            transcription session update param.cpython-311.pyc
            __init__.cpython-311.pyc
+---threads
        annotation.py
        annotation_delta.py
        file citation annotation.py
        file_citation_delta_annotation.py
        file path annotation.py
        file_path_delta_annotation.py
        image file.py
        image_file_content_block.py
1
        image file content block param.py
        image_file_delta.py
        image file delta block.py
        image_file_param.py
        image_url.py
        image url content block.py
        image_url_content_block_param.py
        image url delta.py
-
        image_url_delta_block.py
        image url param.py
-
        message.py
        message content.py
        message_content_delta.py
        message content part param.py
        message_create_params.py
        message deleted.py
        message_delta.py
        message delta event.py
        message_list_params.py
        message_update_params.py
        refusal_content_block.py
        refusal_delta_block.py
        required action function tool call.py
run.py
        run create params.py
        run_list_params.py
run status.py
        run_submit_tool_outputs_params.py
        run update params.py
```

```
text.py
    text content block.py
    text_content_block_param.py
    text delta.py
    text_delta_block.py
    init .py
+---runs
        code_interpreter_logs.py
        code_interpreter_output_image.py
        code interpreter tool call.py
        code_interpreter_tool_call_delta.py
        file search tool call.py
        file_search_tool_call_delta.py
        function tool call.py
        function_tool_call_delta.py
        message creation step details.py
        run_step.py
        run step delta.py
        run_step_delta_event.py
        run step delta message delta.py
        run_step_include.py
        step list params.py
        step_retrieve_params.py
        tool call.py
        tool_calls_step_details.py
        tool_call_delta.py
        tool call delta object.py
        __init__.py
    \---_pycache_
            code interpreter logs.cpython-311.pyc
            code_interpreter_output_image.cpython-311.pyc
            code interpreter tool call.cpython-311.pyc
            code_interpreter_tool_call_delta.cpython-311.pyc
            file search tool call.cpython-311.pyc
            file_search_tool_call_delta.cpython-311.pyc
            function tool call.cpython-311.pyc
            function_tool_call_delta.cpython-311.pyc
            message creation step details.cpython-311.pyc
            run_step.cpython-311.pyc
            run_step_delta.cpython-311.pyc
            run_step_delta_event.cpython-311.pyc
            run_step_delta_message_delta.cpython-311.pyc
            run step include.cpython-311.pyc
            step_list_params.cpython-311.pyc
            step_retrieve_params.cpython-311.pyc
            tool_call.cpython-311.pyc
            tool calls step details.cpython-311.pyc
            tool_call_delta.cpython-311.pyc
            tool call delta object.cpython-311.pyc
```

```
__init__.cpython-311.pyc
   \---_pycache
            annotation.cpython-311.pyc
            annotation_delta.cpython-311.pyc
            file citation annotation.cpython-311.pyc
            file_citation_delta_annotation.cpython-311.pyc
            file path annotation.cpython-311.pyc
            file path delta annotation.cpython-311.pyc
            image_file.cpython-311.pyc
            image file content block.cpython-311.pyc
            image_file_content_block_param.cpython-311.pyc
            image_file_delta.cpython-311.pyc
            image_file_delta_block.cpython-311.pyc
            image file param.cpython-311.pyc
            image_url.cpython-311.pyc
            image url content block.cpython-311.pyc
            image_url_content_block_param.cpython-311.pyc
            image url delta.cpython-311.pyc
            image_url_delta_block.cpython-311.pyc
            image url param.cpython-311.pyc
            message.cpython-311.pyc
            message content.cpython-311.pyc
            message_content_delta.cpython-311.pyc
            message content part param.cpython-311.pyc
            message_create_params.cpython-311.pyc
            message_deleted.cpython-311.pyc
            message delta.cpython-311.pyc
            message_delta_event.cpython-311.pyc
            message list params.cpython-311.pyc
            message_update_params.cpython-311.pyc
            refusal content block.cpython-311.pyc
            refusal_delta_block.cpython-311.pyc
            required action function tool call.cpython-311.pyc
            run.cpython-311.pyc
            run create params.cpython-311.pyc
            run_list_params.cpython-311.pyc
            run status.cpython-311.pyc
            run_submit_tool_outputs_params.cpython-311.pyc
            run update params.cpython-311.pyc
            text.cpython-311.pyc
            text_content_block.cpython-311.pyc
            text_content_block_param.cpython-311.pyc
            text_delta.cpython-311.pyc
            text delta block.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache_
        assistant.cpython-311.pyc
        assistant_create_params.cpython-311.pyc
        assistant deleted.cpython-311.pyc
```

```
assistant_list_params.cpython-311.pyc
            assistant response format option.cpython-311.pyc
            assistant_response_format_option_param.cpython-311.pyc
            assistant stream event.cpython-311.pyc
            assistant_tool.cpython-311.pyc
            assistant tool choice.cpython-311.pyc
            assistant_tool_choice_function.cpython-311.pyc
            assistant tool choice function param.cpython-311.pyc
            assistant_tool_choice_option.cpython-311.pyc
            assistant_tool_choice_option_param.cpython-311.pyc
            assistant tool choice param.cpython-311.pyc
            assistant_tool_param.cpython-311.pyc
            assistant update params.cpython-311.pyc
            code_interpreter_tool.cpython-311.pyc
            code interpreter tool param.cpython-311.pyc
            file_search_tool.cpython-311.pyc
            file search tool param.cpython-311.pyc
            function_tool.cpython-311.pyc
            function tool param.cpython-311.pyc
            thread.cpython-311.pyc
            thread create and run params.cpython-311.pyc
            thread_create_params.cpython-311.pyc
            thread deleted.cpython-311.pyc
            thread_update_params.cpython-311.pyc
            init .cpython-311.pyc
+---chat
        chat completion.py
    -
        chat_completion_assistant_message_param.py
        chat completion audio.py
1
        chat_completion_audio_param.py
        chat completion chunk.py
        chat_completion_content_part_image_param.py
        chat completion content part input audio param.py
        chat_completion_content_part_param.py
        chat completion content part refusal param.py
        chat_completion_content_part_text_param.py
        chat completion deleted.py
        chat_completion_developer_message_param.py
        chat completion function call option param.py
        chat_completion_function_message_param.py
        chat_completion_message.py
1
        chat_completion_message_param.py
        chat_completion_message_tool_call.py
        chat completion message tool call param.py
        chat_completion_modality.py
-
        chat_completion_named_tool_choice_param.py
        chat_completion_prediction_content_param.py
chat completion reasoning effort.py
        chat_completion_role.py
        chat completion store message.py
```

```
chat_completion_stream_options_param.py
     chat completion system message param.py
     chat_completion_token_logprob.py
chat completion tool choice option param.py
     chat_completion_tool_message_param.py
     chat completion tool param.py
     chat_completion_user_message_param.py
     completion create params.py
     completion_list_params.py
     completion_update_params.py
     parsed chat completion.py
     parsed_function_tool_call.py
     init .py
- 1
 +---completions
| message_list_params.py
       init .py
     \--- pycache
             message_list_params.cpython-311.pyc
             init .cpython-311.pyc
 \--- pycache
         chat_completion.cpython-311.pyc
         chat completion assistant message param.cpython-311.pyc
         chat_completion_audio.cpython-311.pyc
         chat_completion_audio_param.cpython-311.pyc
         chat completion chunk.cpython-311.pyc
         chat_completion_content_part_image_param.cpython-311.pyc
         chat completion content part input audio param.cpython-311.pyc
         chat_completion_content_part_param.cpython-311.pyc
         chat completion content part refusal param.cpython-311.pyc
         chat_completion_content_part_text_param.cpython-311.pyc
         chat completion deleted.cpython-311.pyc
         chat_completion_developer_message_param.cpython-311.pyc
         chat completion function call option param.cpython-311.pyc
         chat_completion_function_message_param.cpython-311.pyc
         chat completion message.cpython-311.pyc
         chat_completion_message_param.cpython-311.pyc
         chat completion message tool call.cpython-311.pyc
         chat_completion_message_tool_call_param.cpython-311.pyc
         chat_completion_modality.cpython-311.pyc
         chat_completion_named_tool_choice_param.cpython-311.pyc
         chat_completion_prediction_content_param.cpython-311.pyc
         chat completion reasoning effort.cpython-311.pyc
         chat_completion_role.cpython-311.pyc
         chat_completion_store_message.cpython-311.pyc
         chat_completion_stream_options_param.cpython-311.pyc
         chat completion system message param.cpython-311.pyc
         chat_completion_token_logprob.cpython-311.pyc
         chat completion tool choice option param.cpython-311.pyc
```

```
chat_completion_tool_message_param.cpython-311.pyc
            chat completion tool param.cpython-311.pyc
            chat_completion_user_message_param.cpython-311.pyc
            completion create params.cpython-311.pyc
            completion_list_params.cpython-311.pyc
            completion update params.cpython-311.pyc
            parsed_chat_completion.cpython-311.pyc
            parsed function tool call.cpython-311.pyc
            __init__.cpython-311.pyc
+---fine tuning
       fine_tuning_job.py
        fine tuning job event.py
        fine_tuning_job_integration.py
        fine_tuning_job_wandb_integration.py
        fine_tuning_job_wandb_integration_object.py
        job_create_params.py
        job_list_events_params.py
        job list params.py
        __init__.py
   +---jobs
      | checkpoint list params.py
    | | fine_tuning_job_checkpoint.py
            init .py
      \---__pycache__
               checkpoint list params.cpython-311.pyc
                fine_tuning_job_checkpoint.cpython-311.pyc
                init .cpython-311.pyc
    \--- pycache
            fine_tuning_job.cpython-311.pyc
            fine_tuning_job_event.cpython-311.pyc
            fine_tuning_job_integration.cpython-311.pyc
            fine tuning job wandb integration.cpython-311.pyc
            fine_tuning_job_wandb_integration_object.cpython-311.pyc
            job create params.cpython-311.pyc
            job_list_events_params.cpython-311.pyc
            job list params.cpython-311.pyc
            __init__.cpython-311.pyc
+---responses
        computer_tool.py
        computer tool param.py
        easy_input_message_param.py
        file_search_tool.py
        file_search_tool_param.py
1
    function tool.py
        function_tool_param.py
        input item list params.py
```

```
parsed_response.py
        response.py
        response_audio_delta_event.py
    -
        response audio done event.py
        response_audio_transcript_delta_event.py
        response audio transcript done event.py
        response_code_interpreter_call_code_delta_event.py
        response code interpreter call code done event.py
        response_code_interpreter_call_completed_event.py
        response_code_interpreter_call_interpreting_event.py
        response code interpreter call in progress event.py
ı
        response_code_interpreter_tool_call.py
        response completed event.py
        response_computer_tool_call.py
        response computer tool call output item.py
        response_computer_tool_call_output_screenshot.py
        response_computer_tool_call_output_screenshot_param.py
        response_computer_tool_call_param.py
        response_content_part_added_event.py
        response_content_part_done_event.py
        response created event.py
        response_create_params.py
        response error.py
        response_error_event.py
        response failed event.py
        response_file_search_call_completed_event.py
        response_file_search_call_in_progress_event.py
        response file search call searching event.py
        response_file_search_tool_call.py
        response file search tool call param.py
1
        response_format_text_config.py
        response format text config param.py
        response_format_text_json_schema_config.py
        response format text json schema config param.py
        response_function_call_arguments_delta_event.py
        response function call arguments done event.py
        response_function_tool_call.py
        response function tool call item.py
        response_function_tool_call_output_item.py
        response function tool call param.py
        response_function_web_search.py
        response_function_web_search_param.py
        response_includable.py
        response_incomplete_event.py
        response input content.py
        response_input_content_param.py
        response input file.py
        response_input_file_param.py
1
        response input image.py
        response_input_image_param.py
        response input item param.py
```

```
response_input_message_content_list.py
        response_input_message_content_list_param.py
        response_input_message_item.py
        response input param.py
        response_input_text.py
        response input text param.py
        response_in_progress_event.py
        response item.py
        response_item_list.py
        response_output_item.py
        response_output_item_added_event.py
        response_output_item_done_event.py
        response output message.py
        response_output_message_param.py
        response output refusal.py
        response_output_refusal_param.py
        response_output_text.py
        response_output_text_param.py
        response_reasoning_item.py
        response_reasoning_item_param.py
        response refusal delta event.py
        response_refusal_done_event.py
        response retrieve params.py
        response_status.py
        response stream event.py
        response_text_annotation_delta_event.py
        response_text_config.py
        response text config param.py
        response_text_delta_event.py
1
        response text done event.py
        response_usage.py
        response_web_search_call_completed_event.py
        response_web_search_call_in_progress_event.py
        response_web_search_call_searching_event.py
        tool.py
        tool choice function.py
        tool_choice_function_param.py
        tool choice options.py
        tool_choice_types.py
        tool choice types param.py
        tool_param.py
        web_search_tool.py
        web_search_tool_param.py
        __init__.py
   \---__pycache__
            computer tool.cpython-311.pyc
            computer_tool_param.cpython-311.pyc
            easy_input_message_param.cpython-311.pyc
            file_search_tool.cpython-311.pyc
            file search tool param.cpython-311.pyc
```

```
function_tool.cpython-311.pyc
function tool param.cpython-311.pyc
input_item_list_params.cpython-311.pyc
parsed response.cpython-311.pyc
response.cpython-311.pyc
response audio delta event.cpython-311.pyc
response_audio_done_event.cpython-311.pyc
response audio transcript delta event.cpython-311.pyc
response audio transcript done event.cpython-311.pyc
response_code_interpreter_call_code_delta_event.cpython-311.pyc
response code interpreter call code done event.cpython-311.pyc
response_code_interpreter_call_completed_event.cpython-311.pyc
response code interpreter call interpreting event.cpython-311.pyc
response_code_interpreter_call_in_progress_event.cpython-311.pyc
response code interpreter tool call.cpython-311.pyc
response_completed_event.cpython-311.pyc
response computer tool call.cpython-311.pyc
response_computer_tool_call_output_item.cpython-311.pyc
response computer tool call output screenshot.cpython-311.pyc
response_computer_tool_call_output_screenshot_param.cpython-311.pyc
response computer tool call param.cpython-311.pyc
response_content_part_added_event.cpython-311.pyc
response content part done event.cpython-311.pyc
response_created_event.cpython-311.pyc
response create params.cpython-311.pyc
response_error.cpython-311.pyc
response error event.cpython-311.pyc
response failed event.cpython-311.pyc
response_file_search_call_completed_event.cpython-311.pyc
response file search call in progress event.cpython-311.pyc
response_file_search_call_searching_event.cpython-311.pyc
response file search tool call.cpython-311.pyc
response_file_search_tool_call_param.cpython-311.pyc
response format text config.cpython-311.pyc
response_format_text_config_param.cpython-311.pyc
response format text json schema config.cpython-311.pyc
response_format_text_json_schema_config_param.cpython-311.pyc
response function call arguments delta event.cpython-311.pyc
response_function_call_arguments_done_event.cpython-311.pyc
response function tool call.cpython-311.pyc
response_function_tool_call_item.cpython-311.pyc
response_function_tool_call_output_item.cpython-311.pyc
response_function_tool_call_param.cpython-311.pyc
response_function_web_search.cpython-311.pyc
response function web search param.cpython-311.pyc
response_includable.cpython-311.pyc
response incomplete event.cpython-311.pyc
response_input_content.cpython-311.pyc
response input content param.cpython-311.pyc
response_input_file.cpython-311.pyc
response input file param.cpython-311.pyc
```

```
response_input_image.cpython-311.pyc
            response input image param.cpython-311.pyc
            response_input_item_param.cpython-311.pyc
            response input message content list.cpython-311.pyc
            response_input_message_content_list_param.cpython-311.pyc
            response input message item.cpython-311.pyc
            response_input_param.cpython-311.pyc
            response input text.cpython-311.pyc
            response_input_text_param.cpython-311.pyc
            response_in_progress_event.cpython-311.pyc
            response item.cpython-311.pyc
            response_item_list.cpython-311.pyc
            response output item.cpython-311.pyc
            response_output_item_added_event.cpython-311.pyc
            response output item done event.cpython-311.pyc
            response_output_message.cpython-311.pyc
            response output message param.cpython-311.pyc
            response_output_refusal.cpython-311.pyc
            response output refusal param.cpython-311.pyc
            response_output_text.cpython-311.pyc
            response output text param.cpython-311.pyc
            response_reasoning_item.cpython-311.pyc
            response reasoning item param.cpython-311.pyc
            response_refusal_delta_event.cpython-311.pyc
            response refusal done event.cpython-311.pyc
            response_retrieve_params.cpython-311.pyc
            response_status.cpython-311.pyc
            response stream event.cpython-311.pyc
            response_text_annotation_delta_event.cpython-311.pyc
            response text config.cpython-311.pyc
            response_text_config_param.cpython-311.pyc
            response text delta event.cpython-311.pyc
            response_text_done_event.cpython-311.pyc
            response usage.cpython-311.pyc
            response_web_search_call_completed_event.cpython-311.pyc
            response web search call in progress event.cpython-311.pyc
            response_web_search_call_searching_event.cpython-311.pyc
            tool.cpython-311.pyc
            tool_choice_function.cpython-311.pyc
            tool choice function param.cpython-311.pyc
            tool_choice_options.cpython-311.pyc
            tool_choice_types.cpython-311.pyc
            tool_choice_types_param.cpython-311.pyc
            tool_param.cpython-311.pyc
            web search tool.cpython-311.pyc
            web_search_tool_param.cpython-311.pyc
            init .cpython-311.pyc
+---shared
       all_models.py
       chat model.py
```

```
comparison_filter.py
        compound filter.py
        error_object.py
        function definition.py
        function_parameters.py
        metadata.py
        reasoning.py
        reasoning effort.py
        responses model.py
        response_format_json_object.py
        response_format_json_schema.py
        response_format_text.py
        init .py
   \--- pycache
           all_models.cpython-311.pyc
            chat_model.cpython-311.pyc
            comparison_filter.cpython-311.pyc
            compound filter.cpython-311.pyc
            error_object.cpython-311.pyc
            function definition.cpython-311.pyc
            function_parameters.cpython-311.pyc
            metadata.cpython-311.pyc
            reasoning.cpython-311.pyc
            reasoning effort.cpython-311.pyc
            responses_model.cpython-311.pyc
            response_format_json_object.cpython-311.pyc
            response format json schema.cpython-311.pyc
            response_format_text.cpython-311.pyc
            init .cpython-311.pyc
+---shared params
       chat_model.py
        comparison filter.py
        compound_filter.py
        function definition.py
        function_parameters.py
        metadata.py
        reasoning.py
        reasoning effort.py
        responses_model.py
        response_format_json_object.py
        response_format_json_schema.py
        response_format_text.py
        init .py
1
   \---_pycache_
           chat_model.cpython-311.pyc
            comparison filter.cpython-311.pyc
           compound_filter.cpython-311.pyc
            function definition.cpython-311.pyc
```

```
function_parameters.cpython-311.pyc
            metadata.cpython-311.pyc
            reasoning.cpython-311.pyc
            reasoning effort.cpython-311.pyc
            responses_model.cpython-311.pyc
            response format json object.cpython-311.pyc
            response_format_json_schema.cpython-311.pyc
            response format text.cpython-311.pyc
            __init__.cpython-311.pyc
+---uploads
  | part_create_params.py
      upload part.py
       __init__.py
   \---_pycache_
           part_create_params.cpython-311.pyc
           upload_part.cpython-311.pyc
            __init__.cpython-311.pyc
+---vector stores
| | file_batch_create_params.py
       file batch list files params.py
       file_content_response.py
       file create params.py
       file_list_params.py
       file_update_params.py
       vector store file.py
       vector_store_file_batch.py
       vector store file deleted.py
       __init__.py
  \---__pycache__
            file batch create params.cpython-311.pyc
            file_batch_list_files_params.cpython-311.pyc
            file content response.cpython-311.pyc
            file_create_params.cpython-311.pyc
            file list params.cpython-311.pyc
            file_update_params.cpython-311.pyc
            vector store file.cpython-311.pyc
            vector_store_file_batch.cpython-311.pyc
            vector_store_file_deleted.cpython-311.pyc
            __init__.cpython-311.pyc
\--- pycache
       audio_model.cpython-311.pyc
        audio response format.cpython-311.pyc
        auto_file_chunking_strategy_param.cpython-311.pyc
       batch.cpython-311.pyc
       batch_create_params.cpython-311.pyc
       batch error.cpython-311.pyc
```

```
batch_list_params.cpython-311.pyc
batch request counts.cpython-311.pyc
chat_model.cpython-311.pyc
completion.cpython-311.pyc
completion_choice.cpython-311.pyc
completion create params.cpython-311.pyc
completion_usage.cpython-311.pyc
create embedding response.cpython-311.pyc
embedding.cpython-311.pyc
embedding_create_params.cpython-311.pyc
embedding model.cpython-311.pyc
file_chunking_strategy.cpython-311.pyc
file chunking strategy param.cpython-311.pyc
file_content.cpython-311.pyc
file create params.cpython-311.pyc
file_deleted.cpython-311.pyc
file list params.cpython-311.pyc
file_object.cpython-311.pyc
file purpose.cpython-311.pyc
image.cpython-311.pyc
images response.cpython-311.pyc
image_create_variation_params.cpython-311.pyc
image edit params.cpython-311.pyc
image_generate_params.cpython-311.pyc
image model.cpython-311.pyc
model.cpython-311.pyc
model_deleted.cpython-311.pyc
moderation.cpython-311.pyc
moderation_create_params.cpython-311.pyc
moderation create response.cpython-311.pyc
moderation_image_url_input_param.cpython-311.pyc
moderation model.cpython-311.pyc
moderation_multi_modal_input_param.cpython-311.pyc
moderation text input param.cpython-311.pyc
other_file_chunking_strategy_object.cpython-311.pyc
static file chunking strategy.cpython-311.pyc
static_file_chunking_strategy_object.cpython-311.pyc
static file chunking strategy object param.cpython-311.pyc
static_file_chunking_strategy_param.cpython-311.pyc
upload.cpython-311.pyc
upload_complete_params.cpython-311.pyc
upload_create_params.cpython-311.pyc
vector_store.cpython-311.pyc
vector_store_create_params.cpython-311.pyc
vector store deleted.cpython-311.pyc
vector_store_list_params.cpython-311.pyc
vector_store_search_params.cpython-311.pyc
vector_store_search_response.cpython-311.pyc
vector store update params.cpython-311.pyc
websocket_connection_options.cpython-311.pyc
init .cpython-311.pyc
```

```
+---_extras
  numpy_proxy.py
        pandas_proxy.py
        sounddevice_proxy.py
        common.py
        __init__.py
    \---_pycache__
            numpy_proxy.cpython-311.pyc
            pandas_proxy.cpython-311.pyc
            sounddevice_proxy.cpython-311.pyc
            _common.cpython-311.pyc
            __init__.cpython-311.pyc
+---_utils
        _logs.py
        _proxy.py
        reflection.py
        _streams.py
        _sync.py
        _transform.py
        typing.py
       _utils.py
        init .py
    \---__pycache__
            logs.cpython-311.pyc
            _proxy.cpython-311.pyc
            reflection.cpython-311.pyc
            _streams.cpython-311.pyc
            _sync.cpython-311.pyc
            _transform.cpython-311.pyc
            _typing.cpython-311.pyc
            _utils.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        pagination.cpython-311.pyc
        version.cpython-311.pyc
        _base_client.cpython-311.pyc
        _client.cpython-311.pyc
        _compat.cpython-311.pyc
        _constants.cpython-311.pyc
        exceptions.cpython-311.pyc
        _files.cpython-311.pyc
        _legacy_response.cpython-311.pyc
        _models.cpython-311.pyc
        _module_client.cpython-311.pyc
        _qs.cpython-311.pyc
        resource.cpython-311.pyc
```

```
_response.cpython-311.pyc
                       _streaming.cpython-311.pyc
                       _types.cpython-311.pyc
                       _version.cpython-311.pyc
                       __init__.cpython-311.pyc
                       __main__.cpython-311.pyc
           +---openai-1.68.2.dist-info
                   entry_points.txt
                   INSTALLER
                   METADATA
           1
                   RECORD
                   REQUESTED
           1
                   WHEEL
           \---licenses
           LICENSE
           +---opencv_python-4.11.0.86.dist-info
                   INSTALLER
           LICENSE-3RD-PARTY.txt
                   LICENSE.txt
                   METADATA
                   RECORD
                   top level.txt
                   WHEEL
           +---packaging
                   markers.py
                   metadata.py
           1
                   py.typed
           requirements.py
                   specifiers.py
           tags.py
                   utils.py
                   version.py
                   _elffile.py
                   manylinux.py
                   _musllinux.py
           parser.py
                   _structures.py
                   _tokenizer.py
                   __init__.py
               +---licenses
               | | _spdx.py
Ī
                      __init__.py
                  \---_pycache__
                           _spdx.cpython-311.pyc
                           __init__.cpython-311.pyc
```

```
\---__pycache__
                     markers.cpython-311.pyc
                     metadata.cpython-311.pyc
                     requirements.cpython-311.pyc
                     specifiers.cpython-311.pyc
                     tags.cpython-311.pyc
                     utils.cpython-311.pyc
                     version.cpython-311.pyc
                     _elffile.cpython-311.pyc
                     manylinux.cpython-311.pyc
                     _musllinux.cpython-311.pyc
                     parser.cpython-311.pyc
                     _structures.cpython-311.pyc
                     tokenizer.cpython-311.pyc
                     __init__.cpython-311.pyc
          +---packaging-24.2.dist-info
                  INSTALLER
                  LICENSE
                  LICENSE.APACHE
                  LICENSE.BSD
                  METADATA
                  RECORD
                  WHEEL
          +---pandas
                 conftest.py
                  pyproject.toml
          1
                  testing.py
                 _typing.py
                 _version.py
                 _version_meson.py
                  __init__.py
             +---api
                | __init__.py
                 +---extensions
                 1 1
                    \---_pycache__
                             __init__.cpython-311.pyc
                 +---indexers
                  Ī
                 \---__pycache__
                            __init__.cpython-311.pyc
         | | +---interchange
```

```
| | __init__.cpython-311.pyc
| | +---types
    | | __init__.cpython-311.pyc
 1
     1 1 1
1
     Τ
     __init__.cpython-311.pyc
     1 1 1
    __init__.cpython-311.pyc
1 1
- 1
     1 1
    | +---arrays
    1 1 1
     init .cpython-311.pyc
    1 1
     | +---compat
ı
     | | compressors.py
    | | pickle_compat.py
     | | pyarrow.py
     | | _constants.py
    | | optional.py
     | | | function.py
function.cpython-311.pyc
             __init__.cpython-311.pyc
     - [
     1 1 1
    1 1
           compressors.cpython-311.pyc
1
 1
     1 1
           pickle compat.cpython-311.pyc
     1 1
 pyarrow.cpython-311.pyc
1 1
           _constants.cpython-311.pyc
            _optional.cpython-311.pyc
1 1
            __init__.cpython-311.pyc
1 1
1
 1 1
1 1
    | +---core
```

```
accessor.py
                  algorithms.py
                        api.py
                        apply.py
                        arraylike.py
                        base.py
                        common.py
                        config init.py
                        construction.py
                        flags.py
                        frame.py
                        generic.py
                        indexing.py
                        missing.py
                        nanops.py
                        resample.py
                        roperator.py
ı
                        sample.py
                        series.py
                        shared_docs.py
                        sorting.py
                        __init__.py
                    +---arrays
                            base.py
                            boolean.py
                            categorical.py
                            datetimelike.py
ı
                            datetimes.py
                            floating.py
                    1
                        1
                            integer.py
                            interval.py
                            masked.py
                            numeric.py
                            numpy_.py
                            period.py
                            string_.py
                            string_arrow.py
                            timedeltas.py
                            arrow string mixins.py
                            _mixins.py
                            _ranges.py
                            _utils.py
                            __init__.py
                        +---arrow
Ī
                            -
                                accessors.py
                                array.py
                        -
                                extension_types.py
                               _arrow_utils.py
                               __init__.py
```

```
\--- pycache
               accessors.cpython-311.pyc
               array.cpython-311.pyc
               extension_types.cpython-311.pyc
               arrow utils.cpython-311.pyc
                __init__.cpython-311.pyc
    +---sparse
           accessor.py
      - 1
           array.py
            scipy_sparse.py
            init__.py
       \--- pycache
               accessor.cpython-311.pyc
               array.cpython-311.pyc
               scipy_sparse.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
           base.cpython-311.pyc
            boolean.cpython-311.pyc
            categorical.cpython-311.pyc
            datetimelike.cpython-311.pyc
            datetimes.cpython-311.pyc
            floating.cpython-311.pyc
            integer.cpython-311.pyc
            interval.cpython-311.pyc
            masked.cpython-311.pyc
            numeric.cpython-311.pyc
            numpy_.cpython-311.pyc
            period.cpython-311.pyc
            string .cpython-311.pyc
            string_arrow.cpython-311.pyc
            timedeltas.cpython-311.pyc
            _arrow_string_mixins.cpython-311.pyc
            mixins.cpython-311.pyc
            _ranges.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---array_algos
       datetimelike_accumulations.py
       masked accumulations.py
       masked_reductions.py
       putmask.py
       quantile.py
1
       replace.py
       take.py
       transforms.py
```

```
__init__.py
    \---_pycache__
            datetimelike_accumulations.cpython-311.pyc
            masked_accumulations.cpython-311.pyc
            masked reductions.cpython-311.pyc
            putmask.cpython-311.pyc
            quantile.cpython-311.pyc
            replace.cpython-311.pyc
            take.cpython-311.pyc
            transforms.cpython-311.pyc
            __init__.cpython-311.pyc
+---computation
        align.py
        api.py
        check.py
        common.py
        engines.py
        eval.py
        expr.py
        expressions.py
        ops.py
        parsing.py
        pytables.py
        scope.py
        __init__.py
    \---_pycache__
            align.cpython-311.pyc
            api.cpython-311.pyc
            check.cpython-311.pyc
            common.cpython-311.pyc
            engines.cpython-311.pyc
            eval.cpython-311.pyc
            expr.cpython-311.pyc
            expressions.cpython-311.pyc
            ops.cpython-311.pyc
            parsing.cpython-311.pyc
            pytables.cpython-311.pyc
            scope.cpython-311.pyc
            __init__.cpython-311.pyc
+---dtypes
        api.py
        astype.py
        base.py
        cast.py
common.py
        concat.py
        dtypes.py
```

```
generic.py
        inference.py
        missing.py
        __init__.py
    \---_pycache_
            api.cpython-311.pyc
            astype.cpython-311.pyc
           base.cpython-311.pyc
            cast.cpython-311.pyc
            common.cpython-311.pyc
            concat.cpython-311.pyc
            dtypes.cpython-311.pyc
            generic.cpython-311.pyc
            inference.cpython-311.pyc
           missing.cpython-311.pyc
            __init__.cpython-311.pyc
+---groupby
        base.py
        categorical.py
        generic.py
        groupby.py
        grouper.py
        indexing.py
        numba_.py
        ops.py
        init__.py
    \---_pycache__
           base.cpython-311.pyc
            categorical.cpython-311.pyc
            generic.cpython-311.pyc
            groupby.cpython-311.pyc
            grouper.cpython-311.pyc
            indexing.cpython-311.pyc
            numba_.cpython-311.pyc
            ops.cpython-311.pyc
            __init__.cpython-311.pyc
+---indexers
       objects.py
        utils.py
        __init__.py
   \---__pycache__
           objects.cpython-311.pyc
           utils.cpython-311.pyc
            __init__.cpython-311.pyc
```

+---indexes

```
accessors.py
         api.py
         base.py
         category.py
         datetimelike.py
         datetimes.py
         extension.py
         frozen.py
         interval.py
         multi.py
         period.py
         range.py
         timedeltas.py
         __init__.py
     \---__pycache__
             accessors.cpython-311.pyc
             api.cpython-311.pyc
             base.cpython-311.pyc
             category.cpython-311.pyc
             datetimelike.cpython-311.pyc
             datetimes.cpython-311.pyc
             extension.cpython-311.pyc
             frozen.cpython-311.pyc
             interval.cpython-311.pyc
             multi.cpython-311.pyc
             period.cpython-311.pyc
             range.cpython-311.pyc
             timedeltas.cpython-311.pyc
             init .cpython-311.pyc
 +---interchange
         buffer.py
         column.py
         dataframe.py
         dataframe protocol.py
         from_dataframe.py
         utils.py
         __init__.py
     \---_pycache__
             buffer.cpython-311.pyc
             column.cpython-311.pyc
             dataframe.cpython-311.pyc
             dataframe protocol.cpython-311.pyc
             from_dataframe.cpython-311.pyc
             utils.cpython-311.pyc
             __init__.cpython-311.pyc
 +---internals
| | api.py
```

```
array_manager.py
        base.py
blocks.py
        concat.py
        construction.py
        managers.py
        ops.py
        init .py
    \---_pycache_
            api.cpython-311.pyc
            array_manager.cpython-311.pyc
            base.cpython-311.pyc
           blocks.cpython-311.pyc
            concat.cpython-311.pyc
            construction.cpython-311.pyc
           managers.cpython-311.pyc
            ops.cpython-311.pyc
            __init__.cpython-311.pyc
+---methods
        describe.py
        selectn.py
        to_dict.py
        init .py
    \---_pycache__
           describe.cpython-311.pyc
            selectn.cpython-311.pyc
            to dict.cpython-311.pyc
            __init__.cpython-311.pyc
+---ops
  array_ops.py
        common.py
        dispatch.py
        docstrings.py
        invalid.py
        mask_ops.py
        missing.py
        __init__.py
   \---_pycache_
            array_ops.cpython-311.pyc
            common.cpython-311.pyc
            dispatch.cpython-311.pyc
            docstrings.cpython-311.pyc
            invalid.cpython-311.pyc
           mask_ops.cpython-311.pyc
           missing.cpython-311.pyc
            init .cpython-311.pyc
```

```
+---reshape
                | | api.py
                        concat.py
                 1 1
                        encoding.py
                        melt.py
                        merge.py
                        pivot.py
                        reshape.py
                        tile.py
                        util.py
                        __init__.py
                    \---__pycache__
                            api.cpython-311.pyc
                            concat.cpython-311.pyc
                            encoding.cpython-311.pyc
                           melt.cpython-311.pyc
                           merge.cpython-311.pyc
                           pivot.cpython-311.pyc
                            reshape.cpython-311.pyc
                            tile.cpython-311.pyc
                            util.cpython-311.pyc
                            __init__.cpython-311.pyc
                +---sparse
                 | | api.py
                   | __init__.py
                   \---__pycache__
                           api.cpython-311.pyc
                            __init__.cpython-311.pyc
                +---strings
                | | accessor.py
                    | base.py
                       object_array.py
                        __init__.py
                   \--- pycache
                           accessor.cpython-311.pyc
                            base.cpython-311.pyc
                            object_array.cpython-311.pyc
                            __init__.cpython-311.pyc
                +---tools
Ī
                | | datetimes.py
                 | | numeric.py
                | | timedeltas.py
                1 1
                      times.py
```

```
\---_pycache_
                            datetimes.cpython-311.pyc
                            numeric.cpython-311.pyc
                            timedeltas.cpython-311.pyc
                            times.cpython-311.pyc
                            __init__.cpython-311.pyc
                 +---util
                | | hashing.py
                 | | numba_.py
                         __init__.py
                     \---__pycache__
                            hashing.cpython-311.pyc
                            numba_.cpython-311.pyc
                            __init__.cpython-311.pyc
                 +---window
                 | | common.py
                        doc.py
                    ewm.py
                         expanding.py
                     numba_.py
                         online.py
                         rolling.py
                         __init__.py
                     \---__pycache__
                            common.cpython-311.pyc
                            doc.cpython-311.pyc
                            ewm.cpython-311.pyc
                            expanding.cpython-311.pyc
                            numba_.cpython-311.pyc
                            online.cpython-311.pyc
                            rolling.cpython-311.pyc
                            __init__.cpython-311.pyc
                 +---_numba
                    | executor.py
                 1 1
                        extensions.py
                         __init__.py
                    +---kernels
                    | | mean .py
                     | | min_max_.py
Ī
                    1 1
                            shared.py
                    sum_.py
                 var_.py
                            __init__.py
```

```
\---_pycache_
                   mean .cpython-311.pyc
                   min_max_.cpython-311.pyc
                    shared.cpython-311.pyc
                   sum_.cpython-311.pyc
                   var .cpython-311.pyc
                    __init__.cpython-311.pyc
       \---_pycache__
               executor.cpython-311.pyc
               extensions.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
           accessor.cpython-311.pyc
           algorithms.cpython-311.pyc
            api.cpython-311.pyc
            apply.cpython-311.pyc
            arraylike.cpython-311.pyc
           base.cpython-311.pyc
            common.cpython-311.pyc
            config_init.cpython-311.pyc
            construction.cpython-311.pyc
            flags.cpython-311.pyc
            frame.cpython-311.pyc
            generic.cpython-311.pyc
            indexing.cpython-311.pyc
           missing.cpython-311.pyc
            nanops.cpython-311.pyc
            resample.cpython-311.pyc
            roperator.cpython-311.pyc
            sample.cpython-311.pyc
            series.cpython-311.pyc
            shared docs.cpython-311.pyc
           sorting.cpython-311.pyc
            init .cpython-311.pyc
+---errors
   | __init__.py
   \---_pycache__
            __init__.cpython-311.pyc
+---io
   1
       api.py
       clipboards.py
       common.py
       feather_format.py
   -
       gbq.py
       html.py
       orc.py
```

```
parquet.py
     pickle.py
     pytables.py
     spss.py
     sql.py
     stata.py
     xml.py
     util.py
     \_init\_.py
 +---clipboard
   | __init__.py
     1
    \---__pycache__
             __init__.cpython-311.pyc
 +---excel
         _base.py
        _calamine.py
        _odfreader.py
         odswriter.py
         _openpyxl.py
        _pyxlsb.py
        _util.py
         xlrd.py
         _xlsxwriter.py
         __init__.py
     \---__pycache__
             base.cpython-311.pyc
             _calamine.cpython-311.pyc
             _odfreader.cpython-311.pyc
             _odswriter.cpython-311.pyc
             _openpyxl.cpython-311.pyc
             _pyxlsb.cpython-311.pyc
             util.cpython-311.pyc
             _xlrd.cpython-311.pyc
             xlsxwriter.cpython-311.pyc
             __init__.cpython-311.pyc
 +---formats
        console.py
         css.py
         csvs.py
         excel.py
         format.py
         html.py
         info.py
printing.py
         string.py
```

```
style_render.py
              xml.py
               _color_data.py
              __init__.py
           +---templates
                  html.tpl
                  html style.tpl
                  html_table.tpl
                  latex.tpl
                  latex_longtable.tpl
                  latex_table.tpl
                  string.tpl
           \--- pycache
                  console.cpython-311.pyc
                  css.cpython-311.pyc
                  csvs.cpython-311.pyc
                  excel.cpython-311.pyc
                  format.cpython-311.pyc
                  html.cpython-311.pyc
                  info.cpython-311.pyc
                  printing.cpython-311.pyc
                  string.cpython-311.pyc
                  style.cpython-311.pyc
                  style_render.cpython-311.pyc
                  xml.cpython-311.pyc
                  color data.cpython-311.pyc
                  __init__.cpython-311.pyc
       +---json
       | | _json.py
          | _normalize.py
              _table_schema.py
              __init__.py
          \---__pycache__
                  _json.cpython-311.pyc
                  _normalize.cpython-311.pyc
                  table schema.cpython-311.pyc
                  __init__.cpython-311.pyc
       +---parsers
          | arrow_parser_wrapper.py
              base_parser.py
               c_parser_wrapper.py
              python_parser.py
               readers.py
      __init__.py
```

```
\verb|arrow_parser_wrapper.cpython-311.pyc|
                base_parser.cpython-311.pyc
                c_parser_wrapper.cpython-311.pyc
                python_parser.cpython-311.pyc
                readers.cpython-311.pyc
                init .cpython-311.pyc
   +---sas
           sas7bdat.py
      sasreader.py
           sas_constants.py
           sas_xport.py
            __init__.py
       \--- pycache
               sas7bdat.cpython-311.pyc
               sasreader.cpython-311.pyc
                sas_constants.cpython-311.pyc
                sas xport.cpython-311.pyc
                __init__.cpython-311.pyc
   \---__pycache__
            api.cpython-311.pyc
           clipboards.cpython-311.pyc
            common.cpython-311.pyc
            feather_format.cpython-311.pyc
           gbq.cpython-311.pyc
           html.cpython-311.pyc
           orc.cpython-311.pyc
           parquet.cpython-311.pyc
           pickle.cpython-311.pyc
           pytables.cpython-311.pyc
            spss.cpython-311.pyc
            sql.cpython-311.pyc
           stata.cpython-311.pyc
            xml.cpython-311.pyc
            _util.cpython-311.pyc
            __init__.cpython-311.pyc
+---plotting
       _core.py
       _misc.py
        __init__.py
   +---_matplotlib
           boxplot.py
           converter.py
           core.py
   1
           groupby.py
           hist.py
           misc.py
```

```
| | style.py
                         timeseries.py
                 tools.py
                 __init__.py
                 - 1
                    \---_pycache__
                             boxplot.cpython-311.pyc
                             converter.cpython-311.pyc
                             core.cpython-311.pyc
                             groupby.cpython-311.pyc
                             hist.cpython-311.pyc
                             misc.cpython-311.pyc
                             style.cpython-311.pyc
                             timeseries.cpython-311.pyc
                             tools.cpython-311.pyc
                             __init__.cpython-311.pyc
                 \---_pycache__
                         _core.cpython-311.pyc
                         _misc.cpython-311.pyc
                         __init__.cpython-311.pyc
              +---tests
              | | test_aggregation.py
                     test algos.py
                     test_common.py
                     test_downstream.py
                     test errors.py
                     test_expressions.py
                     test flags.py
                     test_multilevel.py
                     test_nanops.py
                     test_optional_dependency.py
                     test_register_accessor.py
                     test_sorting.py
                     test_take.py
                      __init__.py
                 +---api
                 | | test api.py
                  | test_types.py
                         __init__.py
                 \---_pycache__
                             test api.cpython-311.pyc
                             test_types.cpython-311.pyc
Ī
                             __init__.cpython-311.pyc
                 +---apply
          | | common.py
          | | | test_frame_apply.py
```

```
test_frame_apply_relabeling.py
         test frame transform.py
         test_invalid_arg.py
         test numba.py
         test_series_apply.py
         test series apply relabeling.py
         test_series_transform.py
         test str.py
         __init__.py
     \---_pycache_
             common.cpython-311.pyc
             test frame apply.cpython-311.pyc
             test_frame_apply_relabeling.cpython-311.pyc
             test frame transform.cpython-311.pyc
             test_invalid_arg.cpython-311.pyc
             test numba.cpython-311.pyc
             test_series_apply.cpython-311.pyc
             test_series_apply_relabeling.cpython-311.pyc
             test_series_transform.cpython-311.pyc
             test str.cpython-311.pyc
             __init__.cpython-311.pyc
 +---arithmetic
         common.py
         conftest.py
         test_array_ops.py
         test categorical.py
         test_datetime64.py
         test interval.py
         test_numeric.py
         test object.py
         test_period.py
         test timedelta64.py
         __init__.py
     \---__pycache__
             common.cpython-311.pyc
             conftest.cpython-311.pyc
             test array ops.cpython-311.pyc
             test_categorical.cpython-311.pyc
             test_datetime64.cpython-311.pyc
             test_interval.cpython-311.pyc
             test_numeric.cpython-311.pyc
             test_object.cpython-311.pyc
             test_period.cpython-311.pyc
             test timedelta64.cpython-311.pyc
             __init__.cpython-311.pyc
 +---arrays
| | masked shared.py
```

```
test_array.py
                            test_datetimelike.py
                            test_datetimes.py
                            test_ndarray_backed.py
                            test_period.py
                            test timedeltas.py
                            __init__.py
                        +---boolean
                                test_arithmetic.py
                           -
                                test_astype.py
                        -
                                test_comparison.py
                                test construction.py
                                test_function.py
                                test indexing.py
                                test_logical.py
                                test_ops.py
                                test_reduction.py
                                test repr.py
                                __init__.py
                            \---__pycache__
                                    test arithmetic.cpython-311.pyc
                                    test_astype.cpython-311.pyc
                                    test comparison.cpython-311.pyc
                                    test_construction.cpython-311.pyc
                                    test_function.cpython-311.pyc
                                    test indexing.cpython-311.pyc
                                    test_logical.cpython-311.pyc
                                    test ops.cpython-311.pyc
                                    test_reduction.cpython-311.pyc
                                    test_repr.cpython-311.pyc
                                    __init__.cpython-311.pyc
                        +---categorical
                                test_algos.py
                                test_analytics.py
                                test api.py
                                test_astype.py
                                test constructors.py
                                test_dtypes.py
                                test_indexing.py
                                test_map.py
                                test_missing.py
                                test operators.py
                                test_replace.py
ı
                                test_repr.py
                                test_sorting.py
                        -
                            test subclass.py
                                test_take.py
                                test warnings.py
```

```
- 1
        \---_pycache_
                test_algos.cpython-311.pyc
                test_analytics.cpython-311.pyc
                test api.cpython-311.pyc
                test_astype.cpython-311.pyc
                test constructors.cpython-311.pyc
                test_dtypes.cpython-311.pyc
                test_indexing.cpython-311.pyc
                test map.cpython-311.pyc
                test_missing.cpython-311.pyc
                test operators.cpython-311.pyc
                test_replace.cpython-311.pyc
                test repr.cpython-311.pyc
                test_sorting.cpython-311.pyc
                test subclass.cpython-311.pyc
                test_take.cpython-311.pyc
                test warnings.cpython-311.pyc
                __init__.cpython-311.pyc
    +---datetimes
            test constructors.py
            test_cumulative.py
            test reductions.py
            __init__.py
        \--- pycache
                test_constructors.cpython-311.pyc
                test_cumulative.cpython-311.pyc
                test_reductions.cpython-311.pyc
                __init__.cpython-311.pyc
    +---floating
    1 1
            conftest.py
            test_arithmetic.py
            test_astype.py
            test comparison.py
            test_concat.py
            test construction.py
            test_contains.py
            test_function.py
            test_repr.py
            test_to_numpy.py
            init .py
    \---_pycache_
                conftest.cpython-311.pyc
                test arithmetic.cpython-311.pyc
                test_astype.cpython-311.pyc
                test comparison.cpython-311.pyc
```

```
test_concat.cpython-311.pyc
             test construction.cpython-311.pyc
             test_contains.cpython-311.pyc
             test function.cpython-311.pyc
             test_repr.cpython-311.pyc
             test to numpy.cpython-311.pyc
             __init__.cpython-311.pyc
+---integer
        conftest.py
         test arithmetic.py
         test_comparison.py
         test concat.py
         test_construction.py
         test dtypes.py
         test_function.py
         test indexing.py
        test_reduction.py
         test repr.py
         __init__.py
    \---__pycache__
             conftest.cpython-311.pyc
             {\tt test\_arithmetic.cpython-311.pyc}
             test comparison.cpython-311.pyc
             test concat.cpython-311.pyc
             test_construction.cpython-311.pyc
            test dtypes.cpython-311.pyc
             test_function.cpython-311.pyc
             test indexing.cpython-311.pyc
             test_reduction.cpython-311.pyc
             test_repr.cpython-311.pyc
             __init__.cpython-311.pyc
+---interval
        test_astype.py
         test_formats.py
        test interval.py
        test_interval_pyarrow.py
         test overlaps.py
        __init__.py
\---_pycache_
             test_astype.cpython-311.pyc
             test formats.cpython-311.pyc
             test_interval.cpython-311.pyc
            test_interval_pyarrow.cpython-311.pyc
            test_overlaps.cpython-311.pyc
             __init__.cpython-311.pyc
+---masked
```

```
| | test_arithmetic.py
                1 1 1
                          test_arrow_compat.py
                | | test_function.py
                          test indexing.py
                   1
                           __init__.py
                   | \---__pycache__
                              test arithmetic.cpython-311.pyc
                              test_arrow_compat.cpython-311.pyc
                              test_function.cpython-311.pyc
                              test indexing.cpython-311.pyc
                              __init__.cpython-311.pyc
                   +---numpy_
                   | | test indexing.py
                   | | test_numpy.py
ı
                   \---_pycache_
                   test_indexing.cpython-311.pyc
                              test numpy.cpython-311.pyc
                              __init__.cpython-311.pyc
               | +---period
                   | | test arrow compat.py
                    | test_astype.py
                    | test_constructors.py
                       | test reductions.py
                           __init__.py
                   | \---_pycache__
                              test_arrow_compat.cpython-311.pyc
                              test_astype.cpython-311.pyc
                              test_constructors.cpython-311.pyc
                              test_reductions.cpython-311.pyc
                              init .cpython-311.pyc
                   +---sparse
                   | | test_accessor.py
                           test arithmetics.py
                           test_array.py
                   test_astype.py
                           test_combine_concat.py
                           test_constructors.py
                           test dtype.py
                   test_indexing.py
Ī
                       test_libsparse.py
                           test_reductions.py
                test unary.py
                           __init__.py
               1 1 1
```

```
\---_pycache_
                test accessor.cpython-311.pyc
                test_arithmetics.cpython-311.pyc
                test array.cpython-311.pyc
                test_astype.cpython-311.pyc
                test combine concat.cpython-311.pyc
                test_constructors.cpython-311.pyc
                test dtype.cpython-311.pyc
                test_indexing.cpython-311.pyc
                test_libsparse.cpython-311.pyc
                test reductions.cpython-311.pyc
                test_unary.cpython-311.pyc
                __init__.cpython-311.pyc
    +---string
   | | test_string.py
       | test_string_arrow.py
            __init__.py
       \---_pycache_
               test string.cpython-311.pyc
                test_string_arrow.cpython-311.pyc
                init .cpython-311.pyc
    +---timedeltas
    | test_constructors.py
       | test_cumulative.py
          test reductions.py
            __init__.py
       - 1
       \---__pycache__
                test constructors.cpython-311.pyc
                test_cumulative.cpython-311.pyc
                test reductions.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            masked shared.cpython-311.pyc
            test_array.cpython-311.pyc
            test datetimelike.cpython-311.pyc
            test_datetimes.cpython-311.pyc
            test_ndarray_backed.cpython-311.pyc
            test_period.cpython-311.pyc
            test_timedeltas.cpython-311.pyc
             __init__.cpython-311.pyc
+---base
| | common.py
| test_constructors.py
       test_conversion.py
test fillna.py
```

```
| | | test_misc.py
                | | test_transpose.py
                | | test_unique.py
                       test_value_counts.py
__init__.py
                   \---__pycache__
                            common.cpython-311.pyc
                           test_constructors.cpython-311.pyc
                            test_conversion.cpython-311.pyc
                           test fillna.cpython-311.pyc
                           test_misc.cpython-311.pyc
                           test transpose.cpython-311.pyc
                           test_unique.cpython-311.pyc
                           test value counts.cpython-311.pyc
                            __init__.cpython-311.pyc
Ī
                +---computation
                | | test_compat.py
                   | test_eval.py
                   | init .py
                1 1
                   \---__pycache__
                           test_compat.cpython-311.pyc
                           test eval.cpython-311.pyc
                            __init__.cpython-311.pyc
                +---config
                | | test_config.py
                | | test localization.py
                   | __init__.py
                | \---__pycache__
                           test_config.cpython-311.pyc
                           test_localization.cpython-311.pyc
                            __init__.cpython-311.pyc
                +---construction
                | | test_extract_array.py
                | | init .py
                \---_pycache__
                           test_extract_array.cpython-311.pyc
                           __init__.cpython-311.pyc
          | +---copy_view
Ī
                | | test_array.py
                | | test_astype.py
                | test_chained_assignment_deprecation.py
                | | test_clip.py
          | | | test constructors.py
```

```
test_core_functionalities.py
       test functions.py
       test_indexing.py
       test internals.py
       test_interp_fillna.py
        test methods.py
       test_replace.py
        test setitem.py
       test util.py
       util.py
        __init__.py
    +---index
    | test_datetimeindex.py
           test index.py
           test_periodindex.py
           test_timedeltaindex.py
            __init__.py
       \---_pycache_
                test datetimeindex.cpython-311.pyc
               test_index.cpython-311.pyc
                test periodindex.cpython-311.pyc
                test_timedeltaindex.cpython-311.pyc
                init .cpython-311.pyc
   \---__pycache__
            test array.cpython-311.pyc
            test_astype.cpython-311.pyc
            test chained assignment deprecation.cpython-311.pyc
            test_clip.cpython-311.pyc
            test constructors.cpython-311.pyc
            test_core_functionalities.cpython-311.pyc
            test functions.cpython-311.pyc
            test_indexing.cpython-311.pyc
            test internals.cpython-311.pyc
            test_interp_fillna.cpython-311.pyc
            test methods.cpython-311.pyc
            test_replace.cpython-311.pyc
            test setitem.cpython-311.pyc
            test_util.cpython-311.pyc
            util.cpython-311.pyc
            __init__.cpython-311.pyc
+---dtypes
       test_common.py
       test_concat.py
       test_dtypes.py
       test generic.py
       test_inference.py
       test missing.py
```

```
+---cast
            test_can_hold_element.py
   1 1
             test_construct_from_scalar.py
             test construct ndarray.py
             test_construct_object_arr.py
             test dict compat.py
             test_downcast.py
             test_find_common_type.py
             test infer datetimelike.py
     -
         - 1
             test_infer_dtype.py
             test maybe box native.py
             test_promote.py
             init__.py
         \---_pycache_
                 test_can_hold_element.cpython-311.pyc
                 test_construct_from_scalar.cpython-311.pyc
                 test_construct_ndarray.cpython-311.pyc
                 test construct object arr.cpython-311.pyc
                 test_dict_compat.cpython-311.pyc
                 test downcast.cpython-311.pyc
                 test_find_common_type.cpython-311.pyc
                 test infer datetimelike.cpython-311.pyc
                 test_infer_dtype.cpython-311.pyc
                 test_maybe_box_native.cpython-311.pyc
                 test promote.cpython-311.pyc
                 __init__.cpython-311.pyc
     \---__pycache__
             test common.cpython-311.pyc
             test_concat.cpython-311.pyc
             test dtypes.cpython-311.pyc
             test_generic.cpython-311.pyc
             test inference.cpython-311.pyc
             test_missing.cpython-311.pyc
             init .cpython-311.pyc
 +---extension
         conftest.py
         test_arrow.py
         test_categorical.py
         test_common.py
         test datetime.py
         test_extension.py
         test_interval.py
         test_masked.py
 1
     test numpy.py
         test_period.py
         test sparse.py
```

```
test_string.py
   __init__.py
+---array_with_attr
       array.py
        test_array_with_attr.py
        __init__.py
   \---_pycache_
           array.cpython-311.pyc
            test_array_with_attr.cpython-311.pyc
            __init__.cpython-311.pyc
+---base
        accumulate.py
       base.py
        casting.py
        constructors.py
        dim2.py
        dtype.py
        getitem.py
        groupby.py
        index.py
        interface.py
        io.py
        methods.py
       missing.py
        ops.py
        printing.py
1
        reduce.py
        reshaping.py
        setitem.py
        __init__.py
   \---_pycache_
           accumulate.cpython-311.pyc
           base.cpython-311.pyc
            casting.cpython-311.pyc
           constructors.cpython-311.pyc
           dim2.cpython-311.pyc
           dtype.cpython-311.pyc
            getitem.cpython-311.pyc
           groupby.cpython-311.pyc
            index.cpython-311.pyc
            interface.cpython-311.pyc
            io.cpython-311.pyc
           methods.cpython-311.pyc
           missing.cpython-311.pyc
            ops.cpython-311.pyc
           printing.cpython-311.pyc
            reduce.cpython-311.pyc
```

```
reshaping.cpython-311.pyc
                          setitem.cpython-311.pyc
                           __init__.cpython-311.pyc
| | +---date
             | | array.py
              | \---_pycache__
                          array.cpython-311.pyc
                           __init__.cpython-311.pyc
           | | | array.py
              | | test decimal.py
               1 1
              array.cpython-311.pyc
                          test_decimal.cpython-311.pyc
                           init .cpython-311.pyc
              | +---json
             | | | array.py
              | | test json.py
                | | __init__.py
               | \---_pycache__
                          array.cpython-311.pyc
                           test_json.cpython-311.pyc
                           __init__.cpython-311.pyc
             | +---list
               | | | array.py
               | | test_list.py
                array.cpython-311.pyc
                          test list.cpython-311.pyc
                           __init__.cpython-311.pyc
             | \---__pycache__
                        conftest.cpython-311.pyc
                        test arrow.cpython-311.pyc
                        test_categorical.cpython-311.pyc
Ī
                       test_common.cpython-311.pyc
                        test_datetime.cpython-311.pyc
                        test extension.cpython-311.pyc
        1 1
                        test_interval.cpython-311.pyc
                        test masked.cpython-311.pyc
```

```
test_numpy.cpython-311.pyc
                              test_period.cpython-311.pyc
                              test_sparse.cpython-311.pyc
                              test string.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---frame
                   1 1
                         common.py
                          conftest.py
                          test_alter_axes.py
                   1
                          test api.py
                       -
                          test_arithmetic.py
                          test arrow interface.py
                          test_block_internals.py
                          test constructors.py
                          test_cumulative.py
                           test iteration.py
ı
                          test_logical_ops.py
                          test_nonunique_indexes.py
                       test_npfuncs.py
                           test_query_eval.py
                          test_reductions.py
                       test repr.py
                          test_stack_unstack.py
                           test subclass.py
                          test_ufunc.py
                          test_unary.py
                          test validate.py
ı
                           __init__.py
                  - [
                      - 1
                     +---constructors
                     | | test_from_dict.py
                       | test_from_records.py
                              __init__.py
                       1 1
                          \---_pycache__
                                  test_from_dict.cpython-311.pyc
                                  test from records.cpython-311.pyc
                                  __init__.cpython-311.pyc
                      +---indexing
                              test_coercion.py
                              test_delitem.py
                       1 1
                              test_get.py
                              test getitem.py
                              test_get_value.py
                          ı
                          test_indexing.py
                              test_insert.py
                   1
                     1
                          test mask.py
                              test_setitem.py
                  1 1 1
                              test set value.py
```

```
test_take.py
                                test_where.py
                                test_xs.py
                                __init__.py
                            \--- pycache
                                    test_coercion.cpython-311.pyc
                                    test delitem.cpython-311.pyc
                                    test_get.cpython-311.pyc
                                    test_getitem.cpython-311.pyc
                                    test_get_value.cpython-311.pyc
                                    test_indexing.cpython-311.pyc
                                    test insert.cpython-311.pyc
                                    test_mask.cpython-311.pyc
                                    test setitem.cpython-311.pyc
                                    test_set_value.cpython-311.pyc
                                    test_take.cpython-311.pyc
                                    test_where.cpython-311.pyc
                                    test xs.cpython-311.pyc
                                    __init__.cpython-311.pyc
                        +---methods
                                test_add_prefix_suffix.py
                                test_align.py
                                test asfreq.py
                                test_asof.py
                                test_assign.py
                                test astype.py
                                test_at_time.py
                                test between time.py
                                test_clip.py
                                test_combine.py
                                test_combine_first.py
                                test_compare.py
                                test_convert_dtypes.py
                                test_copy.py
                                test_count.py
                                test_cov_corr.py
                                test_describe.py
                                test diff.py
                                test_dot.py
                                test_drop.py
                                test_droplevel.py
                                test_dropna.py
                                test_drop_duplicates.py
                                test_dtypes.py
ı
                                test_duplicated.py
                                test_equals.py
                        test explode.py
                                test_fillna.py
                                test filter.py
```

```
test_first_and_last.py
                                test_first_valid_index.py
                                test_get_numeric_data.py
                                test head tail.py
                                test_infer_objects.py
                                test info.py
                                test_interpolate.py
                                test isetitem.py
                                test_isin.py
                                test_is_homogeneous_dtype.py
                                test iterrows.py
                                test_join.py
                                test map.py
                                test_matmul.py
                                test nlargest.py
                                test_pct_change.py
                                test_pipe.py
ı
                                test_pop.py
                                test quantile.py
                                test_rank.py
                                test reindex.py
                                test_reindex_like.py
                                test rename.py
                                test_rename_axis.py
                                test reorder levels.py
                                test_replace.py
                                test_reset_index.py
ı
                                test round.py
                                test_sample.py
                                test select dtypes.py
                                test_set_axis.py
                                test_set_index.py
                                test_shift.py
                                test size.py
                                test_sort_index.py
                                test_sort_values.py
                                test_swapaxes.py
                                test swaplevel.py
                                test_to_csv.py
                                test to dict.py
                                test_to_dict_of_blocks.py
                                test_to_numpy.py
                                test_to_period.py
                                test_to_records.py
                                test to timestamp.py
                                test_transpose.py
ı
                                test_truncate.py
                                test_tz_convert.py
                        test_tz_localize.py
                                test_update.py
                                test values.py
```

```
test_value_counts.py
        init .py
\---_pycache__
            test_add_prefix_suffix.cpython-311.pyc
            test align.cpython-311.pyc
            test_asfreq.cpython-311.pyc
            test asof.cpython-311.pyc
            test assign.cpython-311.pyc
            test_astype.cpython-311.pyc
            test at time.cpython-311.pyc
            test_between_time.cpython-311.pyc
            test clip.cpython-311.pyc
            test_combine.cpython-311.pyc
            test combine first.cpython-311.pyc
            test_compare.cpython-311.pyc
            test_convert_dtypes.cpython-311.pyc
            test_copy.cpython-311.pyc
            test count.cpython-311.pyc
            test_cov_corr.cpython-311.pyc
            test describe.cpython-311.pyc
            test_diff.cpython-311.pyc
            test dot.cpython-311.pyc
            test_drop.cpython-311.pyc
            test_droplevel.cpython-311.pyc
            test_dropna.cpython-311.pyc
            test_drop_duplicates.cpython-311.pyc
            test dtypes.cpython-311.pyc
            {\tt test\_duplicated.cpython-311.pyc}
            test equals.cpython-311.pyc
            test_explode.cpython-311.pyc
            test fillna.cpython-311.pyc
            test_filter.cpython-311.pyc
            test first and last.cpython-311.pyc
            test_first_valid_index.cpython-311.pyc
            test get numeric data.cpython-311.pyc
            test_head_tail.cpython-311.pyc
            test infer objects.cpython-311.pyc
            test_info.cpython-311.pyc
            test interpolate.cpython-311.pyc
            test_isetitem.cpython-311.pyc
            test_isin.cpython-311.pyc
            test_is_homogeneous_dtype.cpython-311.pyc
            test_iterrows.cpython-311.pyc
            test join.cpython-311.pyc
            test_map.cpython-311.pyc
            test_matmul.cpython-311.pyc
            test_nlargest.cpython-311.pyc
            test pct change.cpython-311.pyc
            test_pipe.cpython-311.pyc
            test pop.cpython-311.pyc
```

```
test_quantile.cpython-311.pyc
            test rank.cpython-311.pyc
            test_reindex.cpython-311.pyc
            test reindex like.cpython-311.pyc
            test_rename.cpython-311.pyc
            test rename axis.cpython-311.pyc
            test_reorder_levels.cpython-311.pyc
            test replace.cpython-311.pyc
            test_reset_index.cpython-311.pyc
            test_round.cpython-311.pyc
            test sample.cpython-311.pyc
            test_select_dtypes.cpython-311.pyc
            test set axis.cpython-311.pyc
            test_set_index.cpython-311.pyc
            test shift.cpython-311.pyc
            test_size.cpython-311.pyc
            test_sort_index.cpython-311.pyc
            test_sort_values.cpython-311.pyc
            test swapaxes.cpython-311.pyc
            test_swaplevel.cpython-311.pyc
            test to csv.cpython-311.pyc
            test_to_dict.cpython-311.pyc
            test to dict of blocks.cpython-311.pyc
            test_to_numpy.cpython-311.pyc
            test_to_period.cpython-311.pyc
            test_to_records.cpython-311.pyc
            test_to_timestamp.cpython-311.pyc
            test transpose.cpython-311.pyc
            test_truncate.cpython-311.pyc
            test tz convert.cpython-311.pyc
            test_tz_localize.cpython-311.pyc
            test update.cpython-311.pyc
            test_values.cpython-311.pyc
            test value counts.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        common.cpython-311.pyc
        conftest.cpython-311.pyc
        test alter axes.cpython-311.pyc
        test_api.cpython-311.pyc
        test_arithmetic.cpython-311.pyc
        test_arrow_interface.cpython-311.pyc
        test_block_internals.cpython-311.pyc
        test constructors.cpython-311.pyc
        test_cumulative.cpython-311.pyc
        test iteration.cpython-311.pyc
        test_logical_ops.cpython-311.pyc
        test nonunique indexes.cpython-311.pyc
        test_npfuncs.cpython-311.pyc
        test query eval.cpython-311.pyc
```

```
test_reductions.cpython-311.pyc
            test repr.cpython-311.pyc
            test_stack_unstack.cpython-311.pyc
            test subclass.cpython-311.pyc
            test_ufunc.cpython-311.pyc
            test unary.cpython-311.pyc
            test_validate.cpython-311.pyc
            init .cpython-311.pyc
+---generic
        test_duplicate_labels.py
        test_finalize.py
        test frame.py
        test_generic.py
        test label or level utils.py
        test_series.py
        test_to_xarray.py
        __init__.py
   \---_pycache_
            test duplicate labels.cpython-311.pyc
            test_finalize.cpython-311.pyc
            test frame.cpython-311.pyc
            test_generic.cpython-311.pyc
            test label or level utils.cpython-311.pyc
            test_series.cpython-311.pyc
            test_to_xarray.cpython-311.pyc
            __init__.cpython-311.pyc
+---groupby
        conftest.py
        test_all_methods.py
        test_api.py
        test_apply.py
        test_apply_mutate.py
        test_bin_groupby.py
        test_categorical.py
        test counting.py
        test_cumulative.py
        test filters.py
        test_groupby.py
        test_groupby_dropna.py
        test_groupby_subclass.py
        test_grouping.py
        test indexing.py
        test_index_as_string.py
        test_libgroupby.py
        test_missing.py
test numba.py
        test_numeric_only.py
        test pipe.py
```

```
test_raises.py
         test reductions.py
         test_timegrouper.py
         __init__.py
     +---aggregate
    test_aggregate.py
            test cython.py
            test_numba.py
             test_other.py
             __init__.py
         \---_pycache_
                test_aggregate.cpython-311.pyc
                test_cython.cpython-311.pyc
                test_numba.cpython-311.pyc
                test_other.cpython-311.pyc
                 __init__.cpython-311.pyc
     +---methods
    test corrwith.py
            test_describe.py
     1 1
             test groupby shift diff.py
             test_is_monotonic.py
             test nlargest nsmallest.py
             test_nth.py
             test_quantile.py
             test rank.py
             test_sample.py
         1
             test size.py
             test_skew.py
             test_value_counts.py
             __init__.py
         \---_pycache_
                test corrwith.cpython-311.pyc
                test_describe.cpython-311.pyc
                 test groupby shift diff.cpython-311.pyc
                test_is_monotonic.cpython-311.pyc
                 test nlargest nsmallest.cpython-311.pyc
                 test_nth.cpython-311.pyc
                 test_quantile.cpython-311.pyc
                test_rank.cpython-311.pyc
                 test_sample.cpython-311.pyc
                 test size.cpython-311.pyc
                 test_skew.cpython-311.pyc
                 test_value_counts.cpython-311.pyc
                 __init__.cpython-311.pyc
 +---transform
| | test numba.py
```

```
test_transform.py
            init .py
   \---_pycache_
               test_numba.cpython-311.pyc
               test transform.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache_
            conftest.cpython-311.pyc
            test all methods.cpython-311.pyc
            test_api.cpython-311.pyc
            test apply.cpython-311.pyc
            test_apply_mutate.cpython-311.pyc
            test bin groupby.cpython-311.pyc
            test_categorical.cpython-311.pyc
            test_counting.cpython-311.pyc
            test_cumulative.cpython-311.pyc
            test filters.cpython-311.pyc
            test_groupby.cpython-311.pyc
            test groupby dropna.cpython-311.pyc
            test_groupby_subclass.cpython-311.pyc
            test grouping.cpython-311.pyc
            test_indexing.cpython-311.pyc
            test index as string.cpython-311.pyc
            test_libgroupby.cpython-311.pyc
            test_missing.cpython-311.pyc
            test numba.cpython-311.pyc
            test_numeric_only.cpython-311.pyc
            test pipe.cpython-311.pyc
            test_raises.cpython-311.pyc
            test reductions.cpython-311.pyc
            test_timegrouper.cpython-311.pyc
            __init__.cpython-311.pyc
+---indexes
       conftest.py
        test_any_index.py
        test_base.py
        test common.py
        test_datetimelike.py
        test_engines.py
        test_frozen.py
        test_indexing.py
        test index new.py
        test_numpy_compat.py
        test_old_base.py
        test_setops.py
1
        test subclass.py
        __init__.py
```

```
+---base_class
   - 1
         test_constructors.py
    test_formats.py
         test indexing.py
         test_pickle.py
         test reshape.py
         test_setops.py
         test where.py
         __init__.py
    \---_pycache_
             test_constructors.cpython-311.pyc
             test formats.cpython-311.pyc
             test_indexing.cpython-311.pyc
             test pickle.cpython-311.pyc
             test_reshape.cpython-311.pyc
             test_setops.cpython-311.pyc
             test_where.cpython-311.pyc
             __init__.cpython-311.pyc
 +---categorical
        test_append.py
         test astype.py
         test_category.py
         test constructors.py
         test_equals.py
         test_fillna.py
         test formats.py
         test_indexing.py
         test map.py
         test_reindex.py
         test_setops.py
         __init__.py
    \---_pycache__
             test_append.cpython-311.pyc
             test_astype.cpython-311.pyc
             test category.cpython-311.pyc
             test_constructors.cpython-311.pyc
             test equals.cpython-311.pyc
             test_fillna.cpython-311.pyc
             test_formats.cpython-311.pyc
             test_indexing.cpython-311.pyc
             test_map.cpython-311.pyc
             test reindex.cpython-311.pyc
             test_setops.cpython-311.pyc
             __init__.cpython-311.pyc
+---datetimelike
      test_drop_duplicates.py
        test equals.py
```

```
test_indexing.py
                               test_is_monotonic.py
                               test_nat.py
                               test sort values.py
                                test_value_counts.py
                               init .py
                           \---_pycache_
                                   test_drop_duplicates.cpython-311.pyc
                                    test_equals.cpython-311.pyc
                                    test indexing.cpython-311.pyc
                                   test_is_monotonic.cpython-311.pyc
                                   test nat.cpython-311.pyc
                                   test_sort_values.cpython-311.pyc
                                    test value counts.cpython-311.pyc
                                    __init__.cpython-311.pyc
ı
                       +---datetimes
                               test arithmetic.py
                               test_constructors.py
                                test datetime.py
                                test_date_range.py
                                test formats.py
                                test_freq_attr.py
                                test indexing.py
                                test_iter.py
                                test_join.py
                               test npfuncs.py
                                test_ops.py
                                test partial slicing.py
                               test_pickle.py
                                test_reindex.py
                               test_scalar_compat.py
                                test setops.py
                                test_timezones.py
                               init .py
                           +---methods
                           test_asof.py
                                    test astype.py
                                    test_delete.py
                                    test_factorize.py
                                    test_fillna.py
                                    test_insert.py
                                    test isocalendar.py
                                    test_map.py
Ī
                                    test_normalize.py
                                   test_repeat.py
                                    test resolution.py
                                    test_round.py
                                    test shift.py
```

```
test_snap.py
        test to frame.py
        test_to_julian_date.py
        test to period.py
        test_to_pydatetime.py
        test to series.py
        test_tz_convert.py
        test tz localize.py
        test unique.py
        __init__.py
    \---_pycache_
            test asof.cpython-311.pyc
            test_astype.cpython-311.pyc
            test delete.cpython-311.pyc
            test_factorize.cpython-311.pyc
            test fillna.cpython-311.pyc
            test_insert.cpython-311.pyc
            test isocalendar.cpython-311.pyc
            test_map.cpython-311.pyc
            test normalize.cpython-311.pyc
            test_repeat.cpython-311.pyc
            test resolution.cpython-311.pyc
            test_round.cpython-311.pyc
            test shift.cpython-311.pyc
            test snap.cpython-311.pyc
            test_to_frame.cpython-311.pyc
            test to julian date.cpython-311.pyc
            test_to_period.cpython-311.pyc
            test to pydatetime.cpython-311.pyc
            test_to_series.cpython-311.pyc
            test tz convert.cpython-311.pyc
            test_tz_localize.cpython-311.pyc
            test unique.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        test arithmetic.cpython-311.pyc
        test_constructors.cpython-311.pyc
        test datetime.cpython-311.pyc
        test_date_range.cpython-311.pyc
        test_formats.cpython-311.pyc
        test_freq_attr.cpython-311.pyc
        test_indexing.cpython-311.pyc
        test iter.cpython-311.pyc
        test_join.cpython-311.pyc
        test_npfuncs.cpython-311.pyc
        test_ops.cpython-311.pyc
        test_partial_slicing.cpython-311.pyc
        test_pickle.cpython-311.pyc
        test reindex.cpython-311.pyc
```

```
test_scalar_compat.cpython-311.pyc
                                    test setops.cpython-311.pyc
                                    test_timezones.cpython-311.pyc
                                    __init__.cpython-311.pyc
                        +---interval
                                test_astype.py
                                test constructors.py
                                test_equals.py
                                test_formats.py
                                test indexing.py
                                test_interval.py
                                test interval range.py
                                test_interval_tree.py
                                test join.py
                                test_pickle.py
                                test_setops.py
                                __init__.py
                           \---_pycache_
                                    test astype.cpython-311.pyc
                                    test_constructors.cpython-311.pyc
                                    test equals.cpython-311.pyc
                                    test_formats.cpython-311.pyc
                                    test_indexing.cpython-311.pyc
                                    test_interval.cpython-311.pyc
                                    test_interval_range.cpython-311.pyc
                                    test interval tree.cpython-311.pyc
                                    test_join.cpython-311.pyc
                                    test pickle.cpython-311.pyc
                                    test_setops.cpython-311.pyc
                                    __init__.cpython-311.pyc
                        +---multi
                        1 1
                                conftest.py
                                test_analytics.py
                                test_astype.py
                                test compat.py
                                test_constructors.py
                                test conversion.py
                                test_copy.py
                        test_drop.py
                                test_duplicates.py
                                test_equivalence.py
                                test formats.py
                                test_get_level_values.py
ı
                                test_get_set.py
                                test_indexing.py
                                test_integrity.py
                       -
                                test_isin.py
                                test join.py
```

```
test_lexsort.py
        test_missing.py
        test_monotonic.py
test names.py
        test_partial_indexing.py
        test pickle.py
        test_reindex.py
        test reshape.py
        test_setops.py
        test_sorting.py
        test take.py
        __init__.py
   \---__pycache__
            conftest.cpython-311.pyc
            test_analytics.cpython-311.pyc
            test_astype.cpython-311.pyc
            test_compat.cpython-311.pyc
            test constructors.cpython-311.pyc
            test_conversion.cpython-311.pyc
            test copy.cpython-311.pyc
            test_drop.cpython-311.pyc
            test duplicates.cpython-311.pyc
            {\tt test\_equivalence.cpython-311.pyc}
            test formats.cpython-311.pyc
            test_get_level_values.cpython-311.pyc
            test_get_set.cpython-311.pyc
            test indexing.cpython-311.pyc
            test_integrity.cpython-311.pyc
            test isin.cpython-311.pyc
            test_join.cpython-311.pyc
            test_lexsort.cpython-311.pyc
            test_missing.cpython-311.pyc
            test monotonic.cpython-311.pyc
            test_names.cpython-311.pyc
            test partial indexing.cpython-311.pyc
            test_pickle.cpython-311.pyc
            test reindex.cpython-311.pyc
            test_reshape.cpython-311.pyc
            test setops.cpython-311.pyc
            test_sorting.cpython-311.pyc
            test_take.cpython-311.pyc
            __init__.cpython-311.pyc
+---numeric
        test_astype.py
        test_indexing.py
        test_join.py
test numeric.py
        test_setops.py
        init .py
```

```
\---_pycache_
                                  test_astype.cpython-311.pyc
                                  test_indexing.cpython-311.pyc
                                  test_join.cpython-311.pyc
                                  test numeric.cpython-311.pyc
                                  test_setops.cpython-311.pyc
                                  init .cpython-311.pyc
                      +---object
                     | | test_astype.py
                            test_indexing.py
                              __init__.py
                         \--- pycache
                                  test_astype.cpython-311.pyc
                                  test_indexing.cpython-311.pyc
                                  __init__.cpython-311.pyc
                      +---period
                      | test_constructors.py
                      1 1
                              test_formats.py
                              test_freq_attr.py
                              test_indexing.py
                              test join.py
                              test_monotonic.py
                              test_partial_slicing.py
                              test_period.py
                              test_period_range.py
                              test pickle.py
                              test_resolution.py
                              test_scalar_compat.py
                              test_searchsorted.py
                              test_setops.py
                              test_tools.py
                              init .py
                          +---methods
                         - 1
                                  test_asfreq.py
                                  test astype.py
                                  test_factorize.py
                                  test_fillna.py
                                  test_insert.py
                                  test_is_full.py
                                  test repeat.py
                                  test_shift.py
Ī
                                  test_to_timestamp.py
                                  __init__.py
                  1
                     | \---__pycache__
                                      test asfreq.cpython-311.pyc
```

```
test_astype.cpython-311.pyc
                test factorize.cpython-311.pyc
                test_fillna.cpython-311.pyc
                test insert.cpython-311.pyc
                test_is_full.cpython-311.pyc
                test repeat.cpython-311.pyc
                test_shift.cpython-311.pyc
                test to timestamp.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            test_constructors.cpython-311.pyc
            test formats.cpython-311.pyc
            test_freq_attr.cpython-311.pyc
            test indexing.cpython-311.pyc
            test_join.cpython-311.pyc
            test_monotonic.cpython-311.pyc
            test_partial_slicing.cpython-311.pyc
            test period.cpython-311.pyc
            test_period_range.cpython-311.pyc
            test pickle.cpython-311.pyc
            test_resolution.cpython-311.pyc
            test scalar compat.cpython-311.pyc
            test_searchsorted.cpython-311.pyc
            test setops.cpython-311.pyc
            test_tools.cpython-311.pyc
            __init__.cpython-311.pyc
+---ranges
        test constructors.py
        test_indexing.py
        test_join.py
        test_range.py
        test setops.py
        __init__.py
   \---__pycache__
            test constructors.cpython-311.pyc
            test_indexing.cpython-311.pyc
            test join.cpython-311.pyc
            test_range.cpython-311.pyc
            test_setops.cpython-311.pyc
            __init__.cpython-311.pyc
+---timedeltas
1 1
        test_arithmetic.py
        test_constructors.py
        test_delete.py
test formats.py
        test_freq_attr.py
        test indexing.py
```

```
test_join.py
        test_ops.py
    -
        test_pickle.py
- 1
        test_scalar_compat.py
        test_searchsorted.py
        test setops.py
        test_timedelta.py
        test timedelta range.py
        __init__.py
   +---methods
            test_astype.py
            test factorize.py
            test_fillna.py
            test insert.py
            test_repeat.py
            test shift.py
            __init__.py
        \---_pycache_
                test astype.cpython-311.pyc
                test_factorize.cpython-311.pyc
                test fillna.cpython-311.pyc
                test_insert.cpython-311.pyc
                test repeat.cpython-311.pyc
                test_shift.cpython-311.pyc
                 __init__.cpython-311.pyc
    \---__pycache__
            test arithmetic.cpython-311.pyc
            test_constructors.cpython-311.pyc
            test_delete.cpython-311.pyc
            test_formats.cpython-311.pyc
            test_freq_attr.cpython-311.pyc
            test_indexing.cpython-311.pyc
            test join.cpython-311.pyc
            test_ops.cpython-311.pyc
            test pickle.cpython-311.pyc
            test_scalar_compat.cpython-311.pyc
            test searchsorted.cpython-311.pyc
            test_setops.cpython-311.pyc
            test_timedelta.cpython-311.pyc
            test_timedelta_range.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        conftest.cpython-311.pyc
        test_any_index.cpython-311.pyc
        test base.cpython-311.pyc
        test_common.cpython-311.pyc
        test datetimelike.cpython-311.pyc
```

```
test_engines.cpython-311.pyc
                               test frozen.cpython-311.pyc
                               test_indexing.cpython-311.pyc
                               test_index_new.cpython-311.pyc
                               test_numpy_compat.cpython-311.pyc
                               test old base.cpython-311.pyc
                               test_setops.cpython-311.pyc
                               test subclass.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---indexing
                           common.py
                           conftest.py
                           test_at.py
                           test categorical.py
                           test_chaining_and_caching.py
                           test_check_indexer.py
                           test_coercion.py
                           test datetime.py
                           test_floats.py
                           test iat.py
                           test_iloc.py
                           test indexers.py
                           test_indexing.py
                           test loc.py
                           test_na_indexing.py
                           test_partial.py
                           test scalar.py
                           __init__.py
                   1
                      +---interval
                      | | test_interval.py
                         | test_interval_new.py
                               __init__.py
                         \---_pycache__
                                   test_interval.cpython-311.pyc
                                   test interval new.cpython-311.pyc
                                   __init__.cpython-311.pyc
                       +---multiindex
                               test_chaining_and_caching.py
                               test_datetime.py
                               test_getitem.py
                               test iloc.py
                               test_indexing_slow.py
ı
                               test_loc.py
                               test_multiindex.py
                      test partial.py
                               test_setitem.py
                  1 1 1
                               test slice.py
```

```
test_sorted.py
                init .py
            \--- pycache
                    test_chaining_and_caching.cpython-311.pyc
                    test datetime.cpython-311.pyc
                    test_getitem.cpython-311.pyc
                    test iloc.cpython-311.pyc
                    test_indexing_slow.cpython-311.pyc
                    test_loc.cpython-311.pyc
                    test multiindex.cpython-311.pyc
                    test_partial.cpython-311.pyc
                    test setitem.cpython-311.pyc
                    test_slice.cpython-311.pyc
                    test sorted.cpython-311.pyc
                    __init__.cpython-311.pyc
        \---_pycache__
                common.cpython-311.pyc
                conftest.cpython-311.pyc
                test at.cpython-311.pyc
                test_categorical.cpython-311.pyc
                test chaining and caching.cpython-311.pyc
                test_check_indexer.cpython-311.pyc
                test coercion.cpython-311.pyc
                test_datetime.cpython-311.pyc
                test_floats.cpython-311.pyc
                test iat.cpython-311.pyc
                test_iloc.cpython-311.pyc
                test indexers.cpython-311.pyc
                test_indexing.cpython-311.pyc
                test loc.cpython-311.pyc
                test_na_indexing.cpython-311.pyc
                test partial.cpython-311.pyc
                test_scalar.cpython-311.pyc
                init .cpython-311.pyc
    +---interchange
            test_impl.py
            test spec conformance.py
            test_utils.py
            __init__.py
        \---__pycache__
                test impl.cpython-311.pyc
                test_spec_conformance.cpython-311.pyc
                test utils.cpython-311.pyc
                __init__.cpython-311.pyc
   +---internals
| | test api.py
```

```
test_internals.py
                           test_managers.py
                           __init__.py
\---_pycache_
                               test_api.cpython-311.pyc
                               test_internals.cpython-311.pyc
                               test managers.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---io
                      conftest.py
                           generate_legacy_storage_files.py
                           test_clipboard.py
                           test common.py
                           test_compression.py
                           test_feather.py
ı
                           test_fsspec.py
                           test_gbq.py
                           test_gcs.py
                           test_html.py
                           test_http_headers.py
                           test orc.py
                           test_parquet.py
                           test pickle.py
                           test_s3.py
                           test_spss.py
                           test_sql.py
                           test_stata.py
                           init .py
                       +---excel
                       1 1
                               test_odf.py
                               test_odswriter.py
                               test_openpyxl.py
                               test_readers.py
                               test_style.py
                               test writers.py
                               test_xlrd.py
                               test xlsxwriter.py
                               __init__.py
                       \---_pycache_
                                   test_odf.cpython-311.pyc
                                   test odswriter.cpython-311.pyc
                                   test_openpyxl.cpython-311.pyc
ı
                                   test_readers.cpython-311.pyc
                                   test_style.cpython-311.pyc
                                   test_writers.cpython-311.pyc
                                   test_xlrd.cpython-311.pyc
                                   test xlsxwriter.cpython-311.pyc
```

```
__init__.cpython-311.pyc
+---formats
        test console.py
   test_css.py
        test_eng_formatting.py
        test_format.py
        test ipython compat.py
        test_printing.py
        test_to_csv.py
        test to excel.py
        test_to_html.py
        test to latex.py
        test_to_markdown.py
        test to string.py
        __init__.py
   +---style
            test bar.py
   test_exceptions.py
            test format.py
            test_highlight.py
            test html.py
            test_matplotlib.py
            test non unique.py
            test_style.py
            test_tooltip.py
            test to latex.py
            test_to_string.py
            init .py
        \---__pycache__
                test_bar.cpython-311.pyc
                test exceptions.cpython-311.pyc
                test_format.cpython-311.pyc
                test highlight.cpython-311.pyc
                test_html.cpython-311.pyc
                test matplotlib.cpython-311.pyc
                test_non_unique.cpython-311.pyc
                test style.cpython-311.pyc
                test_tooltip.cpython-311.pyc
                test_to_latex.cpython-311.pyc
                test_to_string.cpython-311.pyc
                 __init__.cpython-311.pyc
    \---__pycache__
            test_console.cpython-311.pyc
            test_css.cpython-311.pyc
            test_eng_formatting.cpython-311.pyc
            test_format.cpython-311.pyc
            test ipython compat.cpython-311.pyc
```

```
test_printing.cpython-311.pyc
            test to csv.cpython-311.pyc
            test_to_excel.cpython-311.pyc
            test to html.cpython-311.pyc
            test_to_latex.cpython-311.pyc
            test to markdown.cpython-311.pyc
            test_to_string.cpython-311.pyc
            init .cpython-311.pyc
+---json
       conftest.py
1 1
        test_compression.py
        test deprecated kwargs.py
        test_json_table_schema.py
        test json table schema ext dtype.py
        test_normalize.py
        test pandas.py
        test_readlines.py
        test ujson.py
        __init__.py
    \---__pycache__
            conftest.cpython-311.pyc
            test_compression.cpython-311.pyc
            test deprecated kwargs.cpython-311.pyc
            test_json_table_schema.cpython-311.pyc
            test_json_table_schema_ext_dtype.cpython-311.pyc
            test normalize.cpython-311.pyc
            test_pandas.cpython-311.pyc
            test readlines.cpython-311.pyc
            test_ujson.cpython-311.pyc
            __init__.cpython-311.pyc
+---parser
        conftest.py
        test comment.py
        test_compression.py
        test concatenate chunks.py
        test_converters.py
        test c parser only.py
        test_dialect.py
        test_encoding.py
        test_header.py
        test_index_col.py
        test mangle dupes.py
        test_multi_thread.py
        test_na_values.py
        test_network.py
test_parse_dates.py
        test_python_parser_only.py
        test quoting.py
```

```
test_read_fwf.py
            test_skiprows.py
            test_textreader.py
            test unsupported.py
            test_upcast.py
            init .py
        - 1
                test_chunksize.py
                test_common_basic.py
                test_data_list.py
                test_decimal.py
                test file buffer url.py
                test_float.py
                test index.py
                test_inf.py
                test ints.py
                test_iterator.py
                test_read_errors.py
                test_verbose.py
                init .py
            \--- pycache
                    test_chunksize.cpython-311.pyc
                    test common basic.cpython-311.pyc
                    test_data_list.cpython-311.pyc
                    test_decimal.cpython-311.pyc
                    test file buffer url.cpython-311.pyc
                    test_float.cpython-311.pyc
                    test index.cpython-311.pyc
                    test_inf.cpython-311.pyc
                    test ints.cpython-311.pyc
                    test_iterator.cpython-311.pyc
                    test read errors.cpython-311.pyc
                    test_verbose.cpython-311.pyc
                    init .cpython-311.pyc
        +---dtypes
                test_categorical.py
                test dtypes basic.py
                test_empty.py
                __init__.py
            \---_pycache_
                    test categorical.cpython-311.pyc
                    test_dtypes_basic.cpython-311.pyc
                    test_empty.cpython-311.pyc
                    __init__.cpython-311.pyc
+---usecols
| | | test parse dates.py
```

```
test_strings.py
            test usecols basic.py
            __init__.py
        \---_pycache_
                test parse dates.cpython-311.pyc
                test_strings.cpython-311.pyc
                test usecols basic.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            conftest.cpython-311.pyc
            test comment.cpython-311.pyc
            test_compression.cpython-311.pyc
            test concatenate chunks.cpython-311.pyc
            test_converters.cpython-311.pyc
            test_c_parser_only.cpython-311.pyc
            test_dialect.cpython-311.pyc
            test encoding.cpython-311.pyc
            test_header.cpython-311.pyc
            test index col.cpython-311.pyc
            test_mangle_dupes.cpython-311.pyc
            test multi thread.cpython-311.pyc
            test_na_values.cpython-311.pyc
            test network.cpython-311.pyc
            test_parse_dates.cpython-311.pyc
            test_python_parser_only.cpython-311.pyc
            test quoting.cpython-311.pyc
            test_read_fwf.cpython-311.pyc
            test_skiprows.cpython-311.pyc
            test_textreader.cpython-311.pyc
            test unsupported.cpython-311.pyc
            test_upcast.cpython-311.pyc
            __init__.cpython-311.pyc
+---pytables
        common.py
        conftest.py
        test_append.py
        test categorical.py
        test_compat.py
        test_complex.py
        test_errors.py
        test_file_handling.py
        test keys.py
        test_put.py
        test_pytables_missing.py
        test_read.py
test retain attributes.py
        test_round_trip.py
        test select.py
```

```
test_store.py
           test_subclass.py
           test_timezones.py
           test time series.py
            __init__.py
       \---__pycache__
                common.cpython-311.pyc
               conftest.cpython-311.pyc
                test_append.cpython-311.pyc
                test categorical.cpython-311.pyc
                test_compat.cpython-311.pyc
                test complex.cpython-311.pyc
                test_errors.cpython-311.pyc
                test file handling.cpython-311.pyc
                test_keys.cpython-311.pyc
                test put.cpython-311.pyc
                test_pytables_missing.cpython-311.pyc
                test read.cpython-311.pyc
                test_retain_attributes.cpython-311.pyc
                test round trip.cpython-311.pyc
                test_select.cpython-311.pyc
                test store.cpython-311.pyc
                test_subclass.cpython-311.pyc
                test_timezones.cpython-311.pyc
                test_time_series.cpython-311.pyc
                __init__.cpython-311.pyc
    +---sas
      test byteswap.py
   1
           test_sas.py
           test_sas7bdat.py
           test_xport.py
            init .py
       \--- pycache
                test_byteswap.cpython-311.pyc
                test sas.cpython-311.pyc
               test_sas7bdat.cpython-311.pyc
                test xport.cpython-311.pyc
                __init__.cpython-311.pyc
   +---xml
           conftest.py
           test to xml.py
           test_xml.py
           test_xml_dtypes.py
           __init__.py
1
  - 1
      \---__pycache__
  conftest.cpython-311.pyc
```

```
test_to_xml.cpython-311.pyc
                test_xml.cpython-311.pyc
                test_xml_dtypes.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            conftest.cpython-311.pyc
            generate legacy storage files.cpython-311.pyc
            test_clipboard.cpython-311.pyc
            test_common.cpython-311.pyc
            test compression.cpython-311.pyc
            test_feather.cpython-311.pyc
            test fsspec.cpython-311.pyc
            test_gbq.cpython-311.pyc
            test gcs.cpython-311.pyc
            test_html.cpython-311.pyc
            test_http_headers.cpython-311.pyc
            test_orc.cpython-311.pyc
            test parquet.cpython-311.pyc
            test_pickle.cpython-311.pyc
            test s3.cpython-311.pyc
            test_spss.cpython-311.pyc
            test sql.cpython-311.pyc
            test_stata.cpython-311.pyc
            init .cpython-311.pyc
+---libs
   1
        test hashtable.py
        test_join.py
        test lib.py
        test_libalgos.py
        __init__.py
    \---_pycache_
            test_hashtable.cpython-311.pyc
            test join.cpython-311.pyc
            test_lib.cpython-311.pyc
            test libalgos.cpython-311.pyc
            __init__.cpython-311.pyc
+---plotting
        conftest.py
        test_backend.py
        test boxplot method.py
        test_common.py
        test_converter.py
        test_datetimelike.py
        test_groupby.py
1
    test_hist_method.py
        test misc.py
```

```
test_series.py
               test_style.py
               __init__.py
         +---frame
          | | test frame.py
                   test_frame_color.py
                   test frame groupby.py
                   test_frame_legend.py
                   test_frame_subplots.py
                   test hist box by.py
                   __init__.py
              \---__pycache__
                       test frame.cpython-311.pyc
                       test_frame_color.cpython-311.pyc
                       test_frame_groupby.cpython-311.pyc
                       test_frame_legend.cpython-311.pyc
                       test frame subplots.cpython-311.pyc
                       test_hist_box_by.cpython-311.pyc
                       __init__.cpython-311.pyc
           \---_pycache_
                   common.cpython-311.pyc
                   conftest.cpython-311.pyc
                   test_backend.cpython-311.pyc
                   test_boxplot_method.cpython-311.pyc
                   test common.cpython-311.pyc
                   test_converter.cpython-311.pyc
                   test datetimelike.cpython-311.pyc
                   test_groupby.cpython-311.pyc
                   test_hist_method.cpython-311.pyc
                   test_misc.cpython-311.pyc
                   test series.cpython-311.pyc
                   test_style.cpython-311.pyc
                   init .cpython-311.pyc
       +---reductions
          | test_reductions.py
               test stat reductions.py
               __init__.py
           \---__pycache__
                   test_reductions.cpython-311.pyc
                   test stat reductions.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---resample
| | conftest.py
       | | test_base.py
      | | test datetime index.py
```

```
test_period_index.py
       test_resampler_grouper.py
       test_resample_api.py
       test timedelta.py
       test_time_grouper.py
       init .py
   \---_pycache_
           conftest.cpython-311.pyc
            test_base.cpython-311.pyc
           test_datetime_index.cpython-311.pyc
           test_period_index.cpython-311.pyc
           test_resampler_grouper.cpython-311.pyc
           test_resample_api.cpython-311.pyc
           test timedelta.cpython-311.pyc
           test_time_grouper.cpython-311.pyc
            __init__.cpython-311.pyc
+---reshape
       test_crosstab.py
       test cut.py
       test_from_dummies.py
       test get dummies.py
       test_melt.py
       test pivot.py
       test_pivot_multilevel.py
       test_qcut.py
       test_union_categoricals.py
       test_util.py
       init .py
   +---concat
   1 1
           conftest.py
           test_append.py
            test_append_common.py
            test_categorical.py
            test_concat.py
            test dataframe.py
            test_datetimes.py
            test empty.py
            test_index.py
            test_invalid.py
            test_series.py
            test_sort.py
            init .py
      - 1
   \---_pycache_
               conftest.cpython-311.pyc
               test_append.cpython-311.pyc
               test_append_common.cpython-311.pyc
               test categorical.cpython-311.pyc
```

```
test_concat.cpython-311.pyc
                                   test dataframe.cpython-311.pyc
                                   test_datetimes.cpython-311.pyc
                                   test empty.cpython-311.pyc
                                   test_index.cpython-311.pyc
                                   test invalid.cpython-311.pyc
                                   test_series.cpython-311.pyc
                                   test sort.cpython-311.pyc
                                   __init__.cpython-311.pyc
                      +---merge
                               test_join.py
                               test merge.py
                               test_merge_asof.py
                               test merge cross.py
                               test_merge_index_as_string.py
                               test_merge_ordered.py
                               test_multi.py
                               __init__.py
                      \--- pycache
                                  test_join.cpython-311.pyc
                                   test merge.cpython-311.pyc
                                  test_merge_asof.cpython-311.pyc
                                   test merge cross.cpython-311.pyc
                                  test_merge_index_as_string.cpython-311.pyc
                                   test_merge_ordered.cpython-311.pyc
                                  test multi.cpython-311.pyc
                                   __init__.cpython-311.pyc
                       \---_pycache__
                               test crosstab.cpython-311.pyc
                               test_cut.cpython-311.pyc
                               test from dummies.cpython-311.pyc
                               test_get_dummies.cpython-311.pyc
                               test melt.cpython-311.pyc
                               test_pivot.cpython-311.pyc
                               test pivot multilevel.cpython-311.pyc
                               test_qcut.cpython-311.pyc
                               test union categoricals.cpython-311.pyc
                               test_util.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---scalar
                     test nat.py
                     | test_na_scalar.py
ı
                           init .py
                     +---interval
                  | | test_arithmetic.py
                 | | test constructors.py
```

```
| | test_contains.py
1 1 1
           test_formats.py
           test_interval.py
test overlaps.py
            __init__.py
       \---__pycache__
               test arithmetic.cpython-311.pyc
               test_constructors.cpython-311.pyc
               test_contains.cpython-311.pyc
               test formats.cpython-311.pyc
               test_interval.cpython-311.pyc
               test overlaps.cpython-311.pyc
                __init__.cpython-311.pyc
    +---period
   | test_arithmetic.py
    | | test_asfreq.py
           test period.py
   __init__.py
       \---__pycache__
               test arithmetic.cpython-311.pyc
               test_asfreq.cpython-311.pyc
               test period.cpython-311.pyc
                __init__.cpython-311.pyc
    +---timedelta
   | test_arithmetic.py
    | | test constructors.py
       | test_formats.py
            test_timedelta.py
            __init__.py
   | +---methods
    | | test_as_unit.py
       | | test_round.py
                __init__.py
    1 1
           \--- pycache
                   test_as_unit.cpython-311.pyc
                   test_round.cpython-311.pyc
                   __init__.cpython-311.pyc
       \--- pycache
               test_arithmetic.cpython-311.pyc
               test_constructors.cpython-311.pyc
               test_formats.cpython-311.pyc
               test timedelta.cpython-311.pyc
               __init__.cpython-311.pyc
```

```
+---timestamp
   | |
            test_arithmetic.py
            test_comparisons.py
    1 1
            test constructors.py
            test_formats.py
            test timestamp.py
            test_timezones.py
             init .py
        +---methods
       - 1
                test_as_unit.py
                test_normalize.py
                test replace.py
                test_round.py
                test timestamp method.py
                test_to_julian_date.py
                test_to_pydatetime.py
                test_tz_convert.py
                test_tz_localize.py
                 __init__.py
            \---_pycache__
                    test as unit.cpython-311.pyc
                    test_normalize.cpython-311.pyc
                    test replace.cpython-311.pyc
                    test_round.cpython-311.pyc
                    test_timestamp_method.cpython-311.pyc
                    test_to_julian_date.cpython-311.pyc
                    test_to_pydatetime.cpython-311.pyc
                    test tz convert.cpython-311.pyc
                    test_tz_localize.cpython-311.pyc
                     __init__.cpython-311.pyc
        \---_pycache_
                test_arithmetic.cpython-311.pyc
                test comparisons.cpython-311.pyc
                test_constructors.cpython-311.pyc
                test formats.cpython-311.pyc
                test_timestamp.cpython-311.pyc
                test timezones.cpython-311.pyc
                 __init__.cpython-311.pyc
    \---__pycache__
            test_nat.cpython-311.pyc
            test na scalar.cpython-311.pyc
             __init__.cpython-311.pyc
+---series
| | test_api.py
       test_arithmetic.py
        test constructors.py
```

```
test_cumulative.py
                            test formats.py
                           test_iteration.py
                            test_logical_ops.py
                            test_missing.py
                            test npfuncs.py
                           test_reductions.py
                            test subclass.py
                            test_ufunc.py
                            test_unary.py
                            test validate.py
                            __init__.py
                       +---accessors
                               test cat accessor.py
                                test_dt_accessor.py
                               test_list_accessor.py
                               test_sparse_accessor.py
                               test_struct_accessor.py
                               test_str_accessor.py
                               init .py
                          - 1
                       \--- pycache
                                    test_cat_accessor.cpython-311.pyc
                                    test dt accessor.cpython-311.pyc
                                    test_list_accessor.cpython-311.pyc
                                    test_sparse_accessor.cpython-311.pyc
                                   test_struct_accessor.cpython-311.pyc
                                    test_str_accessor.cpython-311.pyc
                                    init .cpython-311.pyc
                        +---indexing
                               test_datetime.py
                                test delitem.py
                                test_get.py
                                test_getitem.py
                                test_indexing.py
                                test mask.py
                                test_setitem.py
                                test set value.py
                                test_take.py
                                test_where.py
                                test_xs.py
                               __init__.py
                          \---__pycache__
                                    test_datetime.cpython-311.pyc
ı
                                    test_delitem.cpython-311.pyc
                                    test_get.cpython-311.pyc
                                   test_getitem.cpython-311.pyc
                                    test indexing.cpython-311.pyc
```

```
test_mask.cpython-311.pyc
                                    test_setitem.cpython-311.pyc
                                    test_set_value.cpython-311.pyc
                                    test take.cpython-311.pyc
                                    test_where.cpython-311.pyc
                                    test xs.cpython-311.pyc
                                    __init__.cpython-311.pyc
                        +---methods
                                test_add_prefix_suffix.py
                                test align.py
                                test_argsort.py
                                test asof.py
                                test_astype.py
                                test autocorr.py
                                test_between.py
                                test_case_when.py
ı
                                test_clip.py
                                test combine.py
                                test_combine_first.py
                                test compare.py
                                test_convert_dtypes.py
                                test copy.py
                                test_count.py
                                test cov corr.py
                                test_describe.py
                                test_diff.py
                                test drop.py
ı
                                test_dropna.py
                                test drop duplicates.py
                                test_dtypes.py
                                test_duplicated.py
                                test_equals.py
                                test explode.py
                                test_fillna.py
                                test_get_numeric_data.py
                                test_head_tail.py
                                test infer objects.py
                                test_info.py
                                test interpolate.py
                                test_isin.py
                                test_isna.py
                                test_is_monotonic.py
                                test_is_unique.py
                                test item.py
                                test_map.py
ı
                                test_matmul.py
                                test_nlargest.py
                        test_nunique.py
                                test_pct_change.py
                                test pop.py
```

```
test_quantile.py
                                test rank.py
                                test_reindex.py
                        test_reindex_like.py
                                test_rename.py
                                test rename axis.py
                                test_repeat.py
                                test replace.py
                                test_reset_index.py
                                test_round.py
                                test searchsorted.py
                        test_set_name.py
                                test size.py
                                test_sort_index.py
                                test sort values.py
                                test_tolist.py
                                test_to_csv.py
ı
                                test_to_dict.py
                                test to frame.py
                        test_to_numpy.py
                                test truncate.py
                                test_tz_localize.py
                        test unique.py
                                test_unstack.py
                                test update.py
                                test values.py
                                test_value_counts.py
                                test view.py
ı
                                __init__.py
                        1
                            \---_pycache_
                                    test_add_prefix_suffix.cpython-311.pyc
                                    test_align.cpython-311.pyc
                                    test argsort.cpython-311.pyc
                                    test_asof.cpython-311.pyc
                                    test astype.cpython-311.pyc
                                    test_autocorr.cpython-311.pyc
                                    test between.cpython-311.pyc
                                    test_case_when.cpython-311.pyc
                                    test clip.cpython-311.pyc
                                    test_combine.cpython-311.pyc
                                    test_combine_first.cpython-311.pyc
                                    test_compare.cpython-311.pyc
                                    test_convert_dtypes.cpython-311.pyc
                                    test copy.cpython-311.pyc
                                    test_count.cpython-311.pyc
ı
                                    test_cov_corr.cpython-311.pyc
                                    test_describe.cpython-311.pyc
                                    test diff.cpython-311.pyc
                                    test_drop.cpython-311.pyc
                                    test dropna.cpython-311.pyc
```

I		l	I	I	I	test_drop_duplicates.cpython-311.pyc
I		l	I	I	I	test_dtypes.cpython-311.pyc
I		l	I	I	I	test_duplicated.cpython-311.pyc
I		l	I	I	I	test_equals.cpython-311.pyc
I		l	I	I	I	test_explode.cpython-311.pyc
I		l	I	I	I	test_fillna.cpython-311.pyc
I	I		I	I	I	<pre>test_get_numeric_data.cpython-311.pyc</pre>
I	1	l	I	I	I	test_head_tail.cpython-311.pyc
I	I	l	I	I	I	test_infer_objects.cpython-311.pyc
I	1	l	I	I	I	test_info.cpython-311.pyc
I	I		I	I	I	test_interpolate.cpython-311.pyc
I	I		I	I	I	test_isin.cpython-311.pyc
I	I		I	I		test_isna.cpython-311.pyc
I	I		I	I		test_is_monotonic.cpython-311.pyc
I	I		I	I	1	test_is_unique.cpython-311.pyc
I	1		I	I	1	test_item.cpython-311.pyc
I	I		I	I	I	test_map.cpython-311.pyc
I	1	l	I	I	I	test_matmul.cpython-311.pyc
I	I		I	I	1	test_nlargest.cpython-311.pyc
I			I	I	I	test_nunique.cpython-311.pyc
I			I	I	I	test_pct_change.cpython-311.pyc
I	I		I	I		test_pop.cpython-311.pyc
I	I		I	I		test_quantile.cpython-311.pyc
I	1		I	I		test_rank.cpython-311.pyc
I	1		I	I		test_reindex.cpython-311.pyc
I	1		I	I		test_reindex_like.cpython-311.pyc
I	1		I	I		test_rename.cpython-311.pyc
I	I		I	I		test_rename_axis.cpython-311.pyc
I	1		I	I		test_repeat.cpython-311.pyc
I	I		I	I		test_replace.cpython-311.pyc
I	1		I	I		test_reset_index.cpython-311.pyc
I	I		I	I		test_round.cpython-311.pyc
I	1		I	I		test_searchsorted.cpython-311.pyc
I	1		I	I		test_set_name.cpython-311.pyc
I	I		I	ı	1	test_size.cpython-311.pyc
I	I		I	ı	1	test_sort_index.cpython-311.pyc
I	l	l	I	I	1	test_sort_values.cpython-311.pyc
I	l	l	I	I	1	test_tolist.cpython-311.pyc
I	I		I	I	1	test_to_csv.cpython-311.pyc
I	l	l	I	I	1	test_to_dict.cpython-311.pyc
ı	I	l	ı	ı		test to frame.cpython-311.pyc
ı	1	I	ı	ı		test to numpy.cpython-311.pyc
ı	I	l	ı	ı		test truncate.cpython-311.pyc
I	I				1	test_tz_localize.cpython-311.pyc
I	I			l	1	test_unique.cpython-311.pyc
I	I				1	test_unstack.cpython-311.pyc
ı	1			l	1	test_update.cpython-311.pyc
I	1				1	test_values.cpython-311.pyc
I	I	l			I	test_value_counts.cpython-311.pyc
I	I	l			I	test_view.cpython-311.pyc
l	I				I	initcpython-311.pyc

```
\--- pycache
            test_api.cpython-311.pyc
            test arithmetic.cpython-311.pyc
            test_constructors.cpython-311.pyc
            test cumulative.cpython-311.pyc
            test_formats.cpython-311.pyc
            test iteration.cpython-311.pyc
            test_logical_ops.cpython-311.pyc
            test_missing.cpython-311.pyc
            test npfuncs.cpython-311.pyc
            test_reductions.cpython-311.pyc
            test subclass.cpython-311.pyc
            test_ufunc.cpython-311.pyc
            test unary.cpython-311.pyc
            test_validate.cpython-311.pyc
            __init__.cpython-311.pyc
+---strings
        conftest.py
        test api.py
        test_case_justify.py
        test cat.py
        test_extract.py
        test find replace.py
        test_get_dummies.py
        test_split_partition.py
        test strings.py
        test_string_array.py
        __init__.py
    \--- pycache
            conftest.cpython-311.pyc
            test api.cpython-311.pyc
            test_case_justify.cpython-311.pyc
            test cat.cpython-311.pyc
            test_extract.cpython-311.pyc
            test find replace.cpython-311.pyc
            test_get_dummies.cpython-311.pyc
            test split partition.cpython-311.pyc
            test_strings.cpython-311.pyc
            test_string_array.cpython-311.pyc
            __init__.cpython-311.pyc
+---tools
        test_to_datetime.py
        test_to_numeric.py
        test_to_time.py
        test_to_timedelta.py
        __init__.py
```

```
\---__pycache_
                  test to datetime.cpython-311.pyc
                  test_to_numeric.cpython-311.pyc
                  test to time.cpython-311.pyc
                  test_to_timedelta.cpython-311.pyc
                  init .cpython-311.pyc
       +---tseries
       +---frequencies
         | | test_frequencies.py
          | | test_freq_code.py
           | test_inference.py
                  init .py
             \---_pycache_
                     test_frequencies.cpython-311.pyc
                     test_freq_code.cpython-311.pyc
                     test_inference.cpython-311.pyc
                      __init__.cpython-311.pyc
          +---holiday
         | | test_calendar.py
                test federal.py
                  test_holiday.py
                  test_observance.py
                  init .py
          | \--- pycache
                     test_calendar.cpython-311.pyc
                     test_federal.cpython-311.pyc
                     test_holiday.cpython-311.pyc
                     test observance.cpython-311.pyc
                      __init__.cpython-311.pyc
         +---offsets
         | | common.py
                  test_business_day.py
                  test business hour.py
                  test_business_month.py
                  test_business_quarter.py
                  test_business_year.py
                  test_common.py
                  test custom business day.py
                  test_custom_business_hour.py
                  test_custom_business_month.py
                  test_dst.py
      1 1 1
                  test easter.py
                 test_fiscal.py
test index.py
```

```
test_month.py
            test_offsets.py
      test_offsets_properties.py
   test quarter.py
            test_ticks.py
            test week.py
            test_year.py
            init .py
       \---_pycache_
               common.cpython-311.pyc
                test_business_day.cpython-311.pyc
                test business hour.cpython-311.pyc
                test_business_month.cpython-311.pyc
                test business quarter.cpython-311.pyc
                test_business_year.cpython-311.pyc
                test common.cpython-311.pyc
                test_custom_business_day.cpython-311.pyc
                test custom business hour.cpython-311.pyc
                test_custom_business_month.cpython-311.pyc
                test dst.cpython-311.pyc
                test_easter.cpython-311.pyc
                test fiscal.cpython-311.pyc
                test_index.cpython-311.pyc
                test month.cpython-311.pyc
                test_offsets.cpython-311.pyc
                test_offsets_properties.cpython-311.pyc
                test quarter.cpython-311.pyc
                test_ticks.cpython-311.pyc
                test week.cpython-311.pyc
                test_year.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
            __init__.cpython-311.pyc
+---tslibs
       test api.py
       test_array_to_datetime.py
        test ccalendar.py
       test_conversion.py
        test_fields.py
        test_libfrequencies.py
        test_liboffsets.py
        test npy units.py
        test_np_datetime.py
        test_parse_iso8601.py
        test_parsing.py
test period.py
       test_resolution.py
        test strptime.py
```

```
test_timedeltas.py
        test timezones.py
        test_to_offset.py
        test tzconversion.py
        __init__.py
    \---__pycache__
            test api.cpython-311.pyc
            test_array_to_datetime.cpython-311.pyc
            test_ccalendar.cpython-311.pyc
            test conversion.cpython-311.pyc
            test_fields.cpython-311.pyc
            test libfrequencies.cpython-311.pyc
            test_liboffsets.cpython-311.pyc
            test npy units.cpython-311.pyc
            test_np_datetime.cpython-311.pyc
            test parse iso8601.cpython-311.pyc
            test_parsing.cpython-311.pyc
            test period.cpython-311.pyc
            test_resolution.cpython-311.pyc
            test strptime.cpython-311.pyc
            test_timedeltas.cpython-311.pyc
            test timezones.cpython-311.pyc
            test_to_offset.cpython-311.pyc
            test tzconversion.cpython-311.pyc
            __init__.cpython-311.pyc
+---util
        conftest.py
        test assert almost equal.py
        test_assert_attr_equal.py
        test_assert_categorical_equal.py
        test_assert_extension_array_equal.py
        test assert frame equal.py
        test_assert_index_equal.py
        test_assert_interval_array_equal.py
        test_assert_numpy_array_equal.py
        test assert produces warning.py
        test_assert_series_equal.py
        test deprecate.py
        test_deprecate_kwarg.py
        test_deprecate_nonkeyword_arguments.py
        test_doc.py
        test_hashing.py
        test numba.py
        test_rewrite_warning.py
        test_shares_memory.py
        test_show_versions.py
test util.py
        test_validate_args.py
        test validate args and kwargs.py
```

```
test_validate_inclusive.py
        test validate kwargs.py
        __init__.py
    \---_pycache_
            conftest.cpython-311.pyc
            test_assert_almost_equal.cpython-311.pyc
            test assert attr equal.cpython-311.pyc
            test_assert_categorical_equal.cpython-311.pyc
            test_assert_extension_array_equal.cpython-311.pyc
            test assert frame equal.cpython-311.pyc
            test_assert_index_equal.cpython-311.pyc
            test assert interval array equal.cpython-311.pyc
            test_assert_numpy_array_equal.cpython-311.pyc
            test assert produces warning.cpython-311.pyc
            test_assert_series_equal.cpython-311.pyc
            test deprecate.cpython-311.pyc
            test_deprecate_kwarg.cpython-311.pyc
            test deprecate nonkeyword arguments.cpython-311.pyc
            test_doc.cpython-311.pyc
            test hashing.cpython-311.pyc
            test_numba.cpython-311.pyc
            test rewrite warning.cpython-311.pyc
            test_shares_memory.cpython-311.pyc
            test show versions.cpython-311.pyc
            test_util.cpython-311.pyc
            test_validate_args.cpython-311.pyc
            test validate args and kwargs.cpython-311.pyc
            test_validate_inclusive.cpython-311.pyc
            test validate kwargs.cpython-311.pyc
            __init__.cpython-311.pyc
+---window
        conftest.py
        test_api.py
        test apply.py
        test_base_indexer.py
        test cython aggregations.py
        test_dtypes.py
        test ewm.py
        test_expanding.py
        test_groupby.py
        test_numba.py
        test_online.py
        test pairwise.py
        test_rolling.py
        test_rolling_functions.py
        test_rolling_quantile.py
test_rolling_skew_kurt.py
        test_timeseries_window.py
        test win type.py
```

```
| | __init__.py
    +---moments
    conftest.py
             test_moments_consistency_ewm.py
             test moments consistency expanding.py
             test_moments_consistency_rolling.py
             init .py
         \---_pycache_
                 conftest.cpython-311.pyc
                 test_moments_consistency_ewm.cpython-311.pyc
                 test moments consistency expanding.cpython-311.pyc
                 test_moments_consistency_rolling.cpython-311.pyc
                 init .cpython-311.pyc
     \---_pycache_
             conftest.cpython-311.pyc
             test api.cpython-311.pyc
             test_apply.cpython-311.pyc
             test base indexer.cpython-311.pyc
             test_cython_aggregations.cpython-311.pyc
             test dtypes.cpython-311.pyc
             test_ewm.cpython-311.pyc
             test expanding.cpython-311.pyc
             test_groupby.cpython-311.pyc
             test_numba.cpython-311.pyc
             test online.cpython-311.pyc
             test_pairwise.cpython-311.pyc
             test rolling.cpython-311.pyc
             test_rolling_functions.cpython-311.pyc
             test rolling quantile.cpython-311.pyc
             test_rolling_skew_kurt.cpython-311.pyc
             test timeseries window.cpython-311.pyc
             test_win_type.cpython-311.pyc
             init .cpython-311.pyc
 \--- pycache
         test_aggregation.cpython-311.pyc
         test algos.cpython-311.pyc
         test_common.cpython-311.pyc
         test_downstream.cpython-311.pyc
         test_errors.cpython-311.pyc
         test_expressions.cpython-311.pyc
         test flags.cpython-311.pyc
         test_multilevel.cpython-311.pyc
         test nanops.cpython-311.pyc
         test_optional_dependency.cpython-311.pyc
         test register accessor.cpython-311.pyc
         test_sorting.cpython-311.pyc
         test take.cpython-311.pyc
```

```
__init__.cpython-311.pyc
| +---tseries
1 1 1
         api.py
| | frequencies.py
         holiday.py
          offsets.py
          __init__.py
      \---_pycache_
              api.cpython-311.pyc
              frequencies.cpython-311.pyc
             holiday.cpython-311.pyc
             offsets.cpython-311.pyc
              __init__.cpython-311.pyc
  +---util
  | | _decorators.py
      | _doctools.py
         _exceptions.py
      | _print_versions.py
      | _tester.py
          test decorators.py
      | _validators.py
          init .py
      +---version
     1 1
      | \---__pycache__
                 __init__.cpython-311.pyc
      \---_pycache__
              _decorators.cpython-311.pyc
              _doctools.cpython-311.pyc
              _exceptions.cpython-311.pyc
              _print_versions.cpython-311.pyc
              _tester.cpython-311.pyc
              _test_decorators.cpython-311.pyc
              validators.cpython-311.pyc
              __init__.cpython-311.pyc
| +---_config
      | config.py
         dates.py
     | display.py
         localization.py
          __init__.py
1 1
     | \---_pycache__
             config.cpython-311.pyc
```

```
dates.cpython-311.pyc
                display.cpython-311.pyc
                localization.cpython-311.pyc
                __init__.cpython-311.pyc
    +--- libs
            algos.cp311-win_amd64.lib
            algos.cp311-win amd64.pyd
            algos.pyi
            arrays.cp311-win_amd64.lib
            arrays.cp311-win amd64.pyd
            arrays.pyi
            byteswap.cp311-win amd64.lib
            byteswap.cp311-win_amd64.pyd
            byteswap.pyi
            groupby.cp311-win_amd64.lib
            groupby.cp311-win_amd64.pyd
            groupby.pyi
            hashing.cp311-win amd64.lib
            hashing.cp311-win_amd64.pyd
            hashing.pyi
            hashtable.cp311-win_amd64.lib
            hashtable.cp311-win amd64.pyd
            hashtable.pyi
            index.cp311-win amd64.lib
            index.cp311-win_amd64.pyd
            index.pyi
            indexing.cp311-win amd64.lib
            indexing.cp311-win_amd64.pyd
            indexing.pyi
    1
            internals.cp311-win_amd64.lib
            internals.cp311-win amd64.pyd
            internals.pyi
            interval.cp311-win amd64.lib
            interval.cp311-win_amd64.pyd
            interval.pyi
            join.cp311-win_amd64.lib
            join.cp311-win amd64.pyd
            join.pyi
            json.cp311-win amd64.lib
            json.cp311-win_amd64.pyd
            json.pyi
            lib.cp311-win_amd64.lib
            lib.cp311-win_amd64.pyd
            lib.pyi
            missing.cp311-win_amd64.lib
            missing.cp311-win_amd64.pyd
            missing.pyi
            ops.cp311-win amd64.lib
            ops.cp311-win_amd64.pyd
1 1
            ops.pyi
```

```
ops_dispatch.cp311-win_amd64.lib
     ops dispatch.cp311-win amd64.pyd
     ops_dispatch.pyi
     pandas datetime.cp311-win amd64.lib
     pandas_datetime.cp311-win_amd64.pyd
     pandas parser.cp311-win amd64.lib
     pandas_parser.cp311-win_amd64.pyd
     parsers.cp311-win amd64.lib
     parsers.cp311-win_amd64.pyd
     parsers.pyi
     properties.cp311-win amd64.lib
     properties.cp311-win_amd64.pyd
     properties.pyi
     reshape.cp311-win_amd64.lib
     reshape.cp311-win amd64.pyd
     reshape.pyi
     sas.cp311-win amd64.lib
     sas.cp311-win_amd64.pyd
     sas.pyi
     sparse.cp311-win_amd64.lib
     sparse.cp311-win amd64.pyd
     sparse.pyi
     testing.cp311-win amd64.lib
     testing.cp311-win_amd64.pyd
     testing.pyi
     tslib.cp311-win_amd64.lib
     tslib.cp311-win_amd64.pyd
     tslib.pyi
     writers.cp311-win_amd64.lib
     writers.cp311-win amd64.pyd
     writers.pyi
     __init__.py
 -
 +---tslibs
 1 1
         base.cp311-win_amd64.lib
         base.cp311-win amd64.pyd
         ccalendar.cp311-win_amd64.lib
         ccalendar.cp311-win amd64.pyd
         ccalendar.pyi
         conversion.cp311-win amd64.lib
         conversion.cp311-win_amd64.pyd
 conversion.pyi
         dtypes.cp311-win_amd64.lib
         dtypes.cp311-win_amd64.pyd
         dtypes.pyi
         fields.cp311-win_amd64.lib
 fields.cp311-win_amd64.pyd
         fields.pyi
-
         nattype.cp311-win amd64.lib
         nattype.cp311-win_amd64.pyd
         nattype.pyi
```

```
| np_datetime.cp311-win_amd64.lib
                         np datetime.cp311-win amd64.pyd
                1 1
                         np_datetime.pyi
                         offsets.cp311-win amd64.lib
                 offsets.cp311-win_amd64.pyd
                1 1
                         offsets.pyi
                         parsing.cp311-win_amd64.lib
                         parsing.cp311-win amd64.pyd
                         parsing.pyi
                         period.cp311-win_amd64.lib
                         period.cp311-win amd64.pyd
                 - 1
                    - 1
                         period.pyi
                         strptime.cp311-win amd64.lib
                 1 1
                         strptime.cp311-win_amd64.pyd
                 strptime.pyi
                timedeltas.cp311-win_amd64.lib
                         timedeltas.cp311-win amd64.pyd
ı
                         timedeltas.pyi
                 timestamps.cp311-win amd64.lib
                 timestamps.cp311-win_amd64.pyd
                         timestamps.pyi
                 timezones.cp311-win_amd64.lib
                 1 1
                         timezones.cp311-win amd64.pyd
                1 1
                         timezones.pyi
                         tzconversion.cp311-win amd64.lib
                         tzconversion.cp311-win_amd64.pyd
                 tzconversion.pyi
                         vectorized.cp311-win amd64.lib
                         vectorized.cp311-win_amd64.pyd
                         vectorized.pyi
                 __init__.py
                 | \---_pycache__
                             __init__.cpython-311.pyc
                 +---window
                 | aggregations.cp311-win_amd64.lib
                  1 1
                         aggregations.cp311-win amd64.pyd
                         aggregations.pyi
                         indexers.cp311-win amd64.lib
                         indexers.cp311-win_amd64.pyd
                 1 1
                         indexers.pyi
                        __init__.py
                1 1
                    - 1
                    \--- pycache
                             __init__.cpython-311.pyc
Ī
          \---_pycache__
                         __init__.cpython-311.pyc
          | +--- testing
```

```
asserters.py
           compat.py
           contexts.py
           _hypothesis.py
           _io.py
           warnings.py
           __init__.py
       \---_pycache__
               asserters.cpython-311.pyc
               compat.cpython-311.pyc
               contexts.cpython-311.pyc
               hypothesis.cpython-311.pyc
               _io.cpython-311.pyc
                warnings.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
           conftest.cpython-311.pyc
           testing.cpython-311.pyc
           _typing.cpython-311.pyc
           _version.cpython-311.pyc
           version meson.cpython-311.pyc
           __init__.cpython-311.pyc
+---pandas-2.2.3.dist-info
       DELVEWHEEL
       entry points.txt
       INSTALLER
        LICENSE
       METADATA
        RECORD
        WHEEL
+---pandas.libs
msvcp140-0f2ea95580b32bcfc81c235d5751ce78.dl1
+---PIL
       BdfFontFile.py
       BlpImagePlugin.py
       BmpImagePlugin.py
       BufrStubImagePlugin.py
ContainerIO.py
       CurImagePlugin.py
       DcxImagePlugin.py
       DdsImagePlugin.py
       EpsImagePlugin.py
       ExifTags.py
features.py
       FitsImagePlugin.py
        FliImagePlugin.py
```

I				FontFile.py
I	I		I	FpxImagePlugin.py
I	I			FtexImagePlugin.py
I	I		I	GbrImagePlugin.py
I			I	GdImageFile.py
I		1	I	GifImagePlugin.py
I			I	GimpGradientFile.py
I		I	I	GimpPaletteFile.py
I		I	I	GribStubImagePlugin.py
ı		I	I	Hdf5StubImagePlugin.py
ı		ı	I	IcnsImagePlugin.py
ı	I	ı	ı	IcoImagePlugin.py
i I		· I	i I	Image.py
	' I	I	I	ImageChops.py
	' 	' 	'	ImageCms.py
	1			
		1		ImageColor.py
				ImageDraw.py
				ImageDraw2.py
1			1	ImageEnhance.py
I			I	ImageFile.py
I	I		1	<pre>ImageFilter.py</pre>
I			I	ImageFont.py
I			I	<pre>ImageGrab.py</pre>
I	I		I	ImageMath.py
I	I		I	<pre>ImageMode.py</pre>
I				<pre>ImageMorph.py</pre>
I			I	<pre>ImageOps.py</pre>
I			I	<pre>ImagePalette.py</pre>
I	I		1	<pre>ImagePath.py</pre>
I				<pre>ImageQt.py</pre>
I			I	ImageSequence.py
I	I		I	ImageShow.py
I			I	<pre>ImageStat.py</pre>
I		1	I	ImageTk.py
I	I	I	I	ImageTransform.py
I		I	I	ImageWin.py
ı	I	1	I	<pre>ImImagePlugin.py</pre>
ı	1	i I	ı	<pre>ImtImagePlugin.py</pre>
ı	1	ı	ı	<pre>IptcImagePlugin.py</pre>
i I	I	i I	I	Jpeg2KImagePlugin.py
	' 	· I	I	<pre>JpegImagePlugin.py</pre>
	' 		'	JpegPresets.py
	1			
	1			McIdasImagePlugin.py
1	1		1	MicImagePlugin.py MnogImagePlugin.py
1			1	MpegImagePlugin.py
1				MpoImagePlugin.py
1		I		MspImagePlugin.py
I		1		PaletteFile.py
I		I		PalmImagePlugin.py
I		I		PcdImagePlugin.py
I	I	I	I	PcfFontFile.py

```
PcxImagePlugin.py
        PdfImagePlugin.py
        PdfParser.py
1
        PixarImagePlugin.py
PngImagePlugin.py
        PpmImagePlugin.py
        PsdImagePlugin.py
        PSDraw.py
       py.typed
        QoiImagePlugin.py
1
        report.py
        SgiImagePlugin.py
        SpiderImagePlugin.py
ı
        SunImagePlugin.py
        TarIO.py
       TgaImagePlugin.py
        TiffImagePlugin.py
       TiffTags.py
WalImageFile.py
WebPImagePlugin.py
WmfImagePlugin.py
        XbmImagePlugin.py
        XpmImagePlugin.py
XVThumbImagePlugin.py
        binary.py
        _deprecate.py
        _imaging.cp311-win_amd64.pyd
        imaging.pyi
        _imagingcms.cp311-win_amd64.pyd
imagingcms.pyi
        _imagingft.cp311-win_amd64.pyd
       _imagingft.pyi
_imagingmath.cp311-win_amd64.pyd
        _imagingmath.pyi
       _imagingmorph.cp311-win_amd64.pyd
        imagingmorph.pyi
        _imagingtk.cp311-win_amd64.pyd
       imagingtk.pyi
       _tkinter_finder.py
typing.py
        _util.py
        _version.py
       _webp.cp311-win_amd64.pyd
_webp.pyi
        __init__.py
        __main__.py
-
    \---_pycache__
BdfFontFile.cpython-311.pyc
           BlpImagePlugin.cpython-311.pyc
           BmpImagePlugin.cpython-311.pyc
```

l	I		BufrStubImagePlugin.cpython-311.pyc
l	I		ContainerIO.cpython-311.pyc
l	l		CurImagePlugin.cpython-311.pyc
I			DcxImagePlugin.cpython-311.pyc
I			DdsImagePlugin.cpython-311.pyc
I			EpsImagePlugin.cpython-311.pyc
I			ExifTags.cpython-311.pyc
I			features.cpython-311.pyc
I			FitsImagePlugin.cpython-311.pyc
I			FliImagePlugin.cpython-311.pyc
I			FontFile.cpython-311.pyc
I			FpxImagePlugin.cpython-311.pyc
I			FtexImagePlugin.cpython-311.pyc
l			GbrImagePlugin.cpython-311.pyc
l			GdImageFile.cpython-311.pyc
l			GifImagePlugin.cpython-311.pyc
l		1	GimpGradientFile.cpython-311.pyc
I	l		GimpPaletteFile.cpython-311.pyc
I	l		GribStubImagePlugin.cpython-311.pyc
l	I		Hdf5StubImagePlugin.cpython-311.pyc
l	1	1	IcnsImagePlugin.cpython-311.pyc
l	1	1	IcoImagePlugin.cpython-311.pyc
l	1	1	Image.cpython-311.pyc
ı	I	I	ImageChops.cpython-311.pyc
I	I	I	ImageCms.cpython-311.pyc
I	I	I	ImageColor.cpython-311.pyc
· I	' I	' 	ImageDraw.cpython-311.pyc
I	' I	' 	ImageDraw2.cpython-311.pyc
I	I	I	ImageEnhance.cpython-311.pyc
ı	I	I	ImageFile.cpython-311.pyc
I	I	I	ImageFilter.cpython-311.pyc
· I	' I	' 	ImageFont.cpython-311.pyc
I	I	I	ImageGrab.cpython-311.pyc
I	' I	' 	ImageMath.cpython-311.pyc
' I	' I	1	ImageMode.cpython-311.pyc
' I	' I	1	ImageMorph.cpython-311.pyc
' I	' I	1	ImageOps.cpython-311.pyc
' I	! I	1	ImagePalette.cpython-311.pyc
' I	! I	1	ImagePath.cpython-311.pyc
' I	' I	1	ImageQt.cpython-311.pyc
' I	1	1	ImageSequence.cpython-311.pyc
l I	1	1	ImageShow.cpython-311.pyc
	1	1	ImageStat.cpython-311.pyc
	1	1	
· ·	I I	1	<pre>ImageTk.cpython-311.pyc ImageTransform.cpython-311.pyc</pre>
	! I	1	ImageWin.cpython-311.pyc
' I	1	1	ImImagePlugin.cpython-311.pyc
	1	1	ImtImagePlugin.cpython-311.pyc  ImtImagePlugin.cpython-311.pyc
· ·	I I	1	Intimagerlugin.cpython-311.pyc  IptcImagePlugin.cpython-311.pyc
	1	1	
	1	1	<pre>Jpeg2KImagePlugin.cpython-311.pyc</pre> TragsTragsPlugin.cpython-311.pvg
ı	I	I	JpegImagePlugin.cpython-311.pyc

```
JpegPresets.cpython-311.pyc
            McIdasImagePlugin.cpython-311.pyc
            MicImagePlugin.cpython-311.pyc
            MpegImagePlugin.cpython-311.pyc
            MpoImagePlugin.cpython-311.pyc
            MspImagePlugin.cpython-311.pyc
            PaletteFile.cpython-311.pyc
            PalmImagePlugin.cpython-311.pyc
            PcdImagePlugin.cpython-311.pyc
            PcfFontFile.cpython-311.pyc
            PcxImagePlugin.cpython-311.pyc
            PdfImagePlugin.cpython-311.pyc
            PdfParser.cpython-311.pyc
            PixarImagePlugin.cpython-311.pyc
            PngImagePlugin.cpython-311.pyc
            PpmImagePlugin.cpython-311.pyc
            PsdImagePlugin.cpython-311.pyc
            PSDraw.cpython-311.pyc
            QoiImagePlugin.cpython-311.pyc
            report.cpython-311.pyc
            SgiImagePlugin.cpython-311.pyc
            SpiderImagePlugin.cpython-311.pyc
            SunImagePlugin.cpython-311.pyc
            TarIO.cpython-311.pyc
            TgaImagePlugin.cpython-311.pyc
            TiffImagePlugin.cpython-311.pyc
            TiffTags.cpython-311.pyc
            WalImageFile.cpython-311.pyc
            WebPImagePlugin.cpython-311.pyc
            WmfImagePlugin.cpython-311.pyc
            XbmImagePlugin.cpython-311.pyc
            XpmImagePlugin.cpython-311.pyc
            XVThumbImagePlugin.cpython-311.pyc
            binary.cpython-311.pyc
            _deprecate.cpython-311.pyc
            tkinter finder.cpython-311.pyc
            _typing.cpython-311.pyc
            util.cpython-311.pyc
            _version.cpython-311.pyc
            init .cpython-311.pyc
            __main__.cpython-311.pyc
+---pillow-11.0.0.dist-info
        INSTALLER
        LICENSE
        METADATA
        RECORD
        top_level.txt
        WHEEL
        zip-safe
```

```
+---pip
1
        py.typed
        __init__.py
        __main__.py
        __pip-runner__.py
   +---_internal
           build env.py
            cache.py
            configuration.py
           exceptions.py
           main.py
           pyproject.py
            self_outdated_check.py
            wheel builder.py
            __init__.py
        +---cli
          autocompletion.py
        base_command.py
                cmdoptions.py
                command_context.py
                index_command.py
                {\tt main.py}
                main parser.py
                parser.py
                progress_bars.py
                req_command.py
                spinners.py
                status codes.py
                __init__.py
           \---__pycache__
                    autocompletion.cpython-311.pyc
                    base_command.cpython-311.pyc
                    cmdoptions.cpython-311.pyc
                    command_context.cpython-311.pyc
                    index command.cpython-311.pyc
                    main.cpython-311.pyc
                    main parser.cpython-311.pyc
                    parser.cpython-311.pyc
                    progress_bars.cpython-311.pyc
                    req_command.cpython-311.pyc
                    spinners.cpython-311.pyc
                    status codes.cpython-311.pyc
                    __init__.cpython-311.pyc
        +---commands
       - 1
          cache.py
                check.py
               completion.py
```

```
configuration.py
        debug.py
        download.py
        freeze.py
        hash.py
        help.py
        index.py
        inspect.py
        install.py
        list.py
        search.py
        show.py
        uninstall.py
        wheel.py
        __init__.py
    \---_pycache__
            cache.cpython-311.pyc
            check.cpython-311.pyc
            completion.cpython-311.pyc
            configuration.cpython-311.pyc
            debug.cpython-311.pyc
            download.cpython-311.pyc
            freeze.cpython-311.pyc
            hash.cpython-311.pyc
            help.cpython-311.pyc
            index.cpython-311.pyc
            inspect.cpython-311.pyc
            install.cpython-311.pyc
            list.cpython-311.pyc
            search.cpython-311.pyc
            show.cpython-311.pyc
            uninstall.cpython-311.pyc
            wheel.cpython-311.pyc
            __init__.cpython-311.pyc
+---distributions
        base.py
        installed.py
        sdist.py
        wheel.py
        __init__.py
    \---_pycache_
            base.cpython-311.pyc
            installed.cpython-311.pyc
            sdist.cpython-311.pyc
            wheel.cpython-311.pyc
            __init__.cpython-311.pyc
+---index
```

```
| | | collector.py
           | | | package finder.py
           | | sources.py
              __init__.py
\---__pycache__
                         collector.cpython-311.pyc
                         package finder.cpython-311.pyc
                         sources.cpython-311.pyc
                         __init__.cpython-311.pyc
              +---locations
           | | base.py
               | _distutils.py
                 | _sysconfig.py
              Ī
              | \---__pycache__
                        base.cpython-311.pyc
                         _distutils.cpython-311.pyc
                         sysconfig.cpython-311.pyc
                         __init__.cpython-311.pyc
         | +---metadata
              | | base.py
               | | pkg_resources.py
               | | _json.py
                    __init__.py
              | +---importlib
              | | _compat.py
              | | dists.py
               | | _envs.py
                     | __init__.py
              1 1 1
                 | \---__pycache__
                            _compat.cpython-311.pyc
                            dists.cpython-311.pyc
                            _envs.cpython-311.pyc
                            __init__.cpython-311.pyc
              1 1
                 \---_pycache__
                         base.cpython-311.pyc
                         pkg_resources.cpython-311.pyc
                         _json.cpython-311.pyc
                         __init__.cpython-311.pyc
Ī
         | +---models
         | | | candidate.py
         | | | direct_url.py
         | | | format control.py
```

```
index.py
         installation report.py
         link.py
         scheme.py
         search_scope.py
         selection prefs.py
         target_python.py
         wheel.py
         __init__.py
    \---_pycache_
             candidate.cpython-311.pyc
             direct url.cpython-311.pyc
             format_control.cpython-311.pyc
             index.cpython-311.pyc
             installation_report.cpython-311.pyc
             link.cpython-311.pyc
             scheme.cpython-311.pyc
             search scope.cpython-311.pyc
             selection_prefs.cpython-311.pyc
             target python.cpython-311.pyc
             wheel.cpython-311.pyc
             init .cpython-311.pyc
 +---network
         auth.py
         cache.py
         download.py
         lazy_wheel.py
         session.py
         utils.py
         xmlrpc.py
         __init__.py
     \---_pycache_
             auth.cpython-311.pyc
             cache.cpython-311.pyc
             download.cpython-311.pyc
             lazy_wheel.cpython-311.pyc
             session.cpython-311.pyc
            utils.cpython-311.pyc
             xmlrpc.cpython-311.pyc
             __init__.cpython-311.pyc
 +---operations
       check.py
         freeze.py
         prepare.py
         __init__.py
 +---build
```

```
| | build_tracker.py
            metadata.py
1 1
            metadata_editable.py
            metadata legacy.py
 I = I = I
            wheel.py
            wheel editable.py
            wheel_legacy.py
            __init__.py
       \---_pycache_
                build tracker.cpython-311.pyc
                metadata.cpython-311.pyc
                metadata_editable.cpython-311.pyc
                metadata_legacy.cpython-311.pyc
                wheel.cpython-311.pyc
                wheel_editable.cpython-311.pyc
                wheel_legacy.cpython-311.pyc
                __init__.cpython-311.pyc
   +---install
   | | editable legacy.py
   | | wheel.py
            init .py
   \--- pycache
                editable_legacy.cpython-311.pyc
                wheel.cpython-311.pyc
                init .cpython-311.pyc
    \---__pycache__
            check.cpython-311.pyc
            freeze.cpython-311.pyc
            prepare.cpython-311.pyc
            __init__.cpython-311.pyc
 +---req
| constructors.py
        req file.py
        req_install.py
        req set.py
        req_uninstall.py
        __init__.py
- 1
    \---_pycache__
            constructors.cpython-311.pyc
            req_file.cpython-311.pyc
            req_install.cpython-311.pyc
            req_set.cpython-311.pyc
            req uninstall.cpython-311.pyc
            __init__.cpython-311.pyc
```

```
+---resolution
               | | base.py
                +---legacy
                  | | resolver.py
                   \---__pycache__
                             resolver.cpython-311.pyc
                              __init__.cpython-311.pyc
                   +---resolvelib
                  | | base.py
                          candidates.py
                          factory.py
                   1 1
                          found_candidates.py
ı
                          provider.py
                          reporter.py
                   requirements.py
                          resolver.py
                          __init__.py
1
                  | \---_pycache__
                              base.cpython-311.pyc
                              candidates.cpython-311.pyc
                              factory.cpython-311.pyc
                              found candidates.cpython-311.pyc
                              provider.cpython-311.pyc
                              reporter.cpython-311.pyc
                              requirements.cpython-311.pyc
                              resolver.cpython-311.pyc
                              __init__.cpython-311.pyc
                    \---_pycache_
                          base.cpython-311.pyc
                           __init__.cpython-311.pyc
                +---utils
               | | appdirs.py
                | | compat.py
Τ
                       compatibility_tags.py
                datetime.py
                       deprecation.py
                       direct url helpers.py
               1 1
                       egg_link.py
Ī
                       entrypoints.py
                       filesystem.py
               filetypes.py
               glibc.py
         hashes.py
```

```
logging.py
       misc.py
       packaging.py
        retry.py
        setuptools_build.py
        subprocess.py
        temp_dir.py
       unpacking.py
       urls.py
       virtualenv.py
        wheel.py
        _jaraco_text.py
       log.py
       __init__.py
    \---_pycache_
            appdirs.cpython-311.pyc
            compat.cpython-311.pyc
            compatibility tags.cpython-311.pyc
            datetime.cpython-311.pyc
            deprecation.cpython-311.pyc
            direct_url_helpers.cpython-311.pyc
            egg link.cpython-311.pyc
            entrypoints.cpython-311.pyc
            filesystem.cpython-311.pyc
            filetypes.cpython-311.pyc
            glibc.cpython-311.pyc
            hashes.cpython-311.pyc
            logging.cpython-311.pyc
            misc.cpython-311.pyc
            packaging.cpython-311.pyc
            retry.cpython-311.pyc
            setuptools_build.cpython-311.pyc
            subprocess.cpython-311.pyc
            temp_dir.cpython-311.pyc
            unpacking.cpython-311.pyc
            urls.cpython-311.pyc
            virtualenv.cpython-311.pyc
            wheel.cpython-311.pyc
            jaraco text.cpython-311.pyc
            _log.cpython-311.pyc
            __init__.cpython-311.pyc
+---vcs
   1
       bazaar.py
       git.py
       mercurial.py
        subversion.py
        versioncontrol.py
        __init__.py
```

```
\---__pycache__
               bazaar.cpython-311.pyc
               git.cpython-311.pyc
               mercurial.cpython-311.pyc
               subversion.cpython-311.pyc
               versioncontrol.cpython-311.pyc
               __init__.cpython-311.pyc
   \---_pycache__
           build_env.cpython-311.pyc
           cache.cpython-311.pyc
           configuration.cpython-311.pyc
           exceptions.cpython-311.pyc
           main.cpython-311.pyc
           pyproject.cpython-311.pyc
           self_outdated_check.cpython-311.pyc
           wheel_builder.cpython-311.pyc
           __init__.cpython-311.pyc
+---_vendor
       typing_extensions.py
       vendor.txt
       __init__.py
   +---cachecontrol
   adapter.py
           cache.py
           controller.py
           filewrapper.py
           heuristics.py
       1
           py.typed
           serialize.py
           wrapper.py
           _cmd.py
           __init__.py
      +---caches
      | | file cache.py
       | redis_cache.py
               init .py
      \---__pycache__
                  file_cache.cpython-311.pyc
                   redis_cache.cpython-311.pyc
                   __init__.cpython-311.pyc
       \---__pycache__
               adapter.cpython-311.pyc
               cache.cpython-311.pyc
               controller.cpython-311.pyc
               filewrapper.cpython-311.pyc
```

```
heuristics.cpython-311.pyc
           serialize.cpython-311.pyc
           wrapper.cpython-311.pyc
           _cmd.cpython-311.pyc
           __init__.cpython-311.pyc
+---certifi
      cacert.pem
       core.py
       py.typed
       __init__.py
       __main__.py
   \---_pycache__
           core.cpython-311.pyc
           __init__.cpython-311.pyc
           __main__.cpython-311.pyc
+---distlib
compat.py
       database.py
       index.py
       locators.py
       manifest.py
       markers.py
       metadata.py
       resources.py
       scripts.py
       t32.exe
       t64-arm.exe
1
       t64.exe
       util.py
       version.py
       w32.exe
       w64-arm.exe
       w64.exe
       wheel.py
        init .py
  \--- pycache
           compat.cpython-311.pyc
           database.cpython-311.pyc
           index.cpython-311.pyc
           locators.cpython-311.pyc
           manifest.cpython-311.pyc
           markers.cpython-311.pyc
           metadata.cpython-311.pyc
           resources.cpython-311.pyc
           scripts.cpython-311.pyc
           util.cpython-311.pyc
           version.cpython-311.pyc
```

```
wheel.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---distro
    | | distro.py
          | py.typed
               __init__.py
               __main__.py
           \---_pycache_
                  distro.cpython-311.pyc
                  __init__.cpython-311.pyc
                   __main__.cpython-311.pyc
       +---idna
    | | codec.py
          | compat.py
               core.py
               idnadata.py
           intranges.py
              package_data.py
          | py.typed
               uts46data.py
               __init__.py
           \---_pycache_
                  codec.cpython-311.pyc
                  compat.cpython-311.pyc
                   core.cpython-311.pyc
                  idnadata.cpython-311.pyc
                  intranges.cpython-311.pyc
                  package_data.cpython-311.pyc
                  uts46data.cpython-311.pyc
                   __init__.cpython-311.pyc
        +---msgpack
       | | exceptions.py
           | ext.py
             fallback.py
               init .py
        \---__pycache__
                  exceptions.cpython-311.pyc
                  ext.cpython-311.pyc
                  fallback.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---packaging
 | | | markers.py
       | | metadata.py
```

```
requirements.py
                         specifiers.py
                         tags.py
                         utils.py
                         version.py
                         elffile.py
                         _manylinux.py
                         musllinux.py
                         _parser.py
                         _structures.py
                         _tokenizer.py
                         __init__.py
                    +---licenses
                    | | _spdx.py
                    \---__pycache__
                                 _spdx.cpython-311.pyc
                                 __init__.cpython-311.pyc
                      \---_pycache__
                             markers.cpython-311.pyc
                             metadata.cpython-311.pyc
                             requirements.cpython-311.pyc
                             specifiers.cpython-311.pyc
                             tags.cpython-311.pyc
                             utils.cpython-311.pyc
                             version.cpython-311.pyc
                             elffile.cpython-311.pyc
                             _manylinux.cpython-311.pyc
                             _musllinux.cpython-311.pyc
                             _parser.cpython-311.pyc
                             structures.cpython-311.pyc
                             _tokenizer.cpython-311.pyc
                             __init__.cpython-311.pyc
                  +---pkg resources
                 \---__pycache__
                             __init__.cpython-311.pyc
                  +---platformdirs
                         android.py
                         api.py
Ī
                         macos.py
                         py.typed
                 unix.py
                         version.py
                         windows.py
```

```
__main__.py
                      \---_pycache__
                             android.cpython-311.pyc
                             api.cpython-311.pyc
                             macos.cpython-311.pyc
                             unix.cpython-311.pyc
                             version.cpython-311.pyc
                             windows.cpython-311.pyc
                             __init__.cpython-311.pyc
                             __main__.cpython-311.pyc
                  +---pygments
                         cmdline.py
                         console.py
                         filter.py
ı
                         formatter.py
                         lexer.py
                         modeline.py
                         plugin.py
                         regexopt.py
                         scanner.py
                         sphinxext.py
                         style.py
                         token.py
                         unistring.py
                         util.py
                         __init__.py
                         __main__.py
                      +---filters
                      \---__pycache__
                                 __init__.cpython-311.pyc
                      +---formatters
                      bbcode.py
                             groff.py
                             html.py
                      img.py
                             irc.py
                             latex.py
                             other.py
                             pangomarkup.py
Ī
                             rtf.py
                             svg.py
                    terminal.py
                             terminal256.py
                             mapping.py
```

```
\---_pycache_
                bbcode.cpython-311.pyc
                groff.cpython-311.pyc
                html.cpython-311.pyc
                img.cpython-311.pyc
                irc.cpython-311.pyc
                latex.cpython-311.pyc
                other.cpython-311.pyc
                pangomarkup.cpython-311.pyc
                rtf.cpython-311.pyc
                svg.cpython-311.pyc
                terminal.cpython-311.pyc
                terminal256.cpython-311.pyc
                _mapping.cpython-311.pyc
                __init__.cpython-311.pyc
     +---lexers
   python.py
            mapping.py
            __init__.py
     1 1
        \---__pycache__
                python.cpython-311.pyc
                _mapping.cpython-311.pyc
                __init__.cpython-311.pyc
    +---styles
            _mapping.py
   1 1
           __init__.py
        \---_pycache__
                mapping.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            cmdline.cpython-311.pyc
            console.cpython-311.pyc
            filter.cpython-311.pyc
            formatter.cpython-311.pyc
            lexer.cpython-311.pyc
            modeline.cpython-311.pyc
            plugin.cpython-311.pyc
            regexopt.cpython-311.pyc
            scanner.cpython-311.pyc
            sphinxext.cpython-311.pyc
            style.cpython-311.pyc
            token.cpython-311.pyc
            unistring.cpython-311.pyc
            util.cpython-311.pyc
```

```
__init__.cpython-311.pyc
                              __main__.cpython-311.pyc
                  +---pyproject_hooks
                  | | py.typed
                          _impl.py
                          __init__.py
                     +---_in_process
                     | | _in_process.py
                      \---_pycache_
                                 _in_process.cpython-311.pyc
                                  __init__.cpython-311.pyc
                      \---_pycache__
                              _impl.cpython-311.pyc
                              __init__.cpython-311.pyc
                  +---requests
                  | | adapters.py
                          api.py
                          auth.py
                          certs.py
                          compat.py
                          cookies.py
                          exceptions.py
                          help.py
                          hooks.py
                  1
                          models.py
                          packages.py
                          sessions.py
                          status codes.py
                          structures.py
                          utils.py
                          _internal_utils.py
                          __init__.py
                          __version__.py
                     \---__pycache__
                              adapters.cpython-311.pyc
                              api.cpython-311.pyc
                              auth.cpython-311.pyc
                              certs.cpython-311.pyc
                              compat.cpython-311.pyc
Ī
                              cookies.cpython-311.pyc
                              exceptions.cpython-311.pyc
                              help.cpython-311.pyc
                              hooks.cpython-311.pyc
                              models.cpython-311.pyc
```

```
packages.cpython-311.pyc
                             sessions.cpython-311.pyc
                             status_codes.cpython-311.pyc
                             structures.cpython-311.pyc
                             utils.cpython-311.pyc
                             internal utils.cpython-311.pyc
                             __init__.cpython-311.pyc
                             __version__.cpython-311.pyc
                 +---resolvelib
                 | | providers.py
                        py.typed
                         reporters.py
                         resolvers.py
                         structs.py
                         __init__.py
ı
                    +---compat
                  | | collections abc.py
                      \---__pycache__
                     collections abc.cpython-311.pyc
                                 __init__.cpython-311.pyc
                     \---__pycache__
                             providers.cpython-311.pyc
                             reporters.cpython-311.pyc
                             resolvers.cpython-311.pyc
                             structs.cpython-311.pyc
                             __init__.cpython-311.pyc
                 +---rich
                    | abc.py
                         align.py
                         ansi.py
                         bar.py
                         box.py
                         cells.py
                         color.py
                         color_triplet.py
                     columns.py
                         console.py
                         constrain.py
                         containers.py
                 - 1
                         control.py
                      Ī
                         default_styles.py
                         diagnose.py
                 emoji.py
                         errors.py
                         filesize.py
```

```
file_proxy.py
                            highlighter.py
                            json.py
                            jupyter.py
                            layout.py
                            live.py
                            live_render.py
                            logging.py
ı
                            markup.py
                            measure.py
                            padding.py
                            pager.py
                            palette.py
ı
                            panel.py
                            pretty.py
                            progress.py
                            progress_bar.py
ı
                            prompt.py
                            protocol.py
                            py.typed
                            region.py
                            repr.py
                            rule.py
                            scope.py
                            screen.py
                            segment.py
                            spinner.py
ı
                            status.py
                            style.py
                            styled.py
                            syntax.py
                            table.py
                            terminal_theme.py
                            text.py
                            theme.py
                            themes.py
                            traceback.py
                            tree.py
                            _cell_widths.py
                            emoji codes.py
                            _emoji_replace.py
                            _export_format.py
                            _extension.py
                            _fileno.py
                            _inspect.py
                            _log_render.py
ı
                            _loop.py
                            _null_file.py
                            _palettes.py
                            _pick.py
                            _ratio.py
```

```
_spinners.py
    stack.py
    _timer.py
    _win32_console.py
    _windows.py
    windows renderer.py
    _wrap.py
    __init__.py
    __main__.py
\---_pycache_
        abc.cpython-311.pyc
        align.cpython-311.pyc
        ansi.cpython-311.pyc
        bar.cpython-311.pyc
        box.cpython-311.pyc
        cells.cpython-311.pyc
        color.cpython-311.pyc
        color triplet.cpython-311.pyc
        columns.cpython-311.pyc
        console.cpython-311.pyc
        constrain.cpython-311.pyc
        containers.cpython-311.pyc
        control.cpython-311.pyc
        default styles.cpython-311.pyc
        diagnose.cpython-311.pyc
        emoji.cpython-311.pyc
        errors.cpython-311.pyc
        filesize.cpython-311.pyc
        file proxy.cpython-311.pyc
        highlighter.cpython-311.pyc
        json.cpython-311.pyc
        jupyter.cpython-311.pyc
        layout.cpython-311.pyc
        live.cpython-311.pyc
        live render.cpython-311.pyc
        logging.cpython-311.pyc
        markup.cpython-311.pyc
        measure.cpython-311.pyc
        padding.cpython-311.pyc
        pager.cpython-311.pyc
        palette.cpython-311.pyc
        panel.cpython-311.pyc
        pretty.cpython-311.pyc
        progress.cpython-311.pyc
        progress_bar.cpython-311.pyc
        prompt.cpython-311.pyc
        protocol.cpython-311.pyc
        region.cpython-311.pyc
        repr.cpython-311.pyc
        rule.cpython-311.pyc
```

```
scope.cpython-311.pyc
            screen.cpython-311.pyc
            segment.cpython-311.pyc
            spinner.cpython-311.pyc
            status.cpython-311.pyc
            style.cpython-311.pyc
            styled.cpython-311.pyc
            syntax.cpython-311.pyc
            table.cpython-311.pyc
            terminal_theme.cpython-311.pyc
            text.cpython-311.pyc
            theme.cpython-311.pyc
            themes.cpython-311.pyc
            traceback.cpython-311.pyc
            tree.cpython-311.pyc
            _cell_widths.cpython-311.pyc
            _emoji_codes.cpython-311.pyc
            _emoji_replace.cpython-311.pyc
            _export_format.cpython-311.pyc
            _extension.cpython-311.pyc
            fileno.cpython-311.pyc
            _inspect.cpython-311.pyc
            log render.cpython-311.pyc
            _loop.cpython-311.pyc
            null file.cpython-311.pyc
            _palettes.cpython-311.pyc
            _pick.cpython-311.pyc
            ratio.cpython-311.pyc
            _spinners.cpython-311.pyc
            stack.cpython-311.pyc
            _timer.cpython-311.pyc
            _win32_console.cpython-311.pyc
            _windows.cpython-311.pyc
            _windows_renderer.cpython-311.pyc
            _wrap.cpython-311.pyc
            init .cpython-311.pyc
            __main__.cpython-311.pyc
+---tomli
        py.typed
        _parser.py
        _re.py
       _types.py
        __init__.py
   \---__pycache__
           _parser.cpython-311.pyc
           _re.cpython-311.pyc
            _types.cpython-311.pyc
            __init__.cpython-311.pyc
```

```
+---truststore
                | | py.typed
                        _api.py
                 macos.py
_openssl.py
                       _ssl_constants.py
                        _windows.py
                        __init__.py
                   \---_pycache_
                           _api.cpython-311.pyc
                           _macos.cpython-311.pyc
                           openssl.cpython-311.pyc
                           _ssl_constants.cpython-311.pyc
                           windows.cpython-311.pyc
                           __init__.cpython-311.pyc
                +---urllib3
                | | connection.py
                       connectionpool.py
                        exceptions.py
                       fields.py
                   filepost.py
                       poolmanager.py
                    request.py
                        response.py
                       _collections.py
                       version.py
                        __init__.py
                - 1
                   +---contrib
                 1 1 1
                           appengine.py
                    | | ntlmpool.py
                           pyopenssl.py
                           securetransport.py
                           socks.py
                           _appengine_environ.py
                           __init__.py
                   +--- securetransport
                   | | | bindings.py
                               low_level.py
                               __init__.py
                           \--- pycache
                                  bindings.cpython-311.pyc
Ī
                                  low_level.cpython-311.pyc
                                   __init__.cpython-311.pyc
```

appengine.cpython-311.pyc

```
ntlmpool.cpython-311.pyc
                                  pyopenssl.cpython-311.pyc
                                  securetransport.cpython-311.pyc
                                  socks.cpython-311.pyc
                                   _appengine_environ.cpython-311.pyc
                                   init .cpython-311.pyc
                       +---packages
                      | | six.py
                              __init__.py
                      - 1
                         - 1
                         +---backports
                       makefile.py
                                  weakref_finalize.py
                                   init .py
                               \---_pycache_
                                      makefile.cpython-311.pyc
                                      weakref finalize.cpython-311.pyc
                                      __init__.cpython-311.pyc
                          \---__pycache__
                                  six.cpython-311.pyc
                                   __init__.cpython-311.pyc
                       +---util
                     | | connection.py
                         - 1
                              proxy.py
                               queue.py
                       1
                               request.py
                               response.py
                               retry.py
                               ssltransport.py
                              ssl_.py
                              ssl_match_hostname.py
                               timeout.py
                              url.py
                              wait.py
                               __init__.py
                           \---__pycache__
                                   connection.cpython-311.pyc
                                  proxy.cpython-311.pyc
                                  queue.cpython-311.pyc
                                   request.cpython-311.pyc
                                   response.cpython-311.pyc
ı
                                  retry.cpython-311.pyc
                                  ssltransport.cpython-311.pyc
                                   ssl .cpython-311.pyc
                                   ssl_match_hostname.cpython-311.pyc
                                   timeout.cpython-311.pyc
```

```
url.cpython-311.pyc
                               wait.cpython-311.pyc
                               __init__.cpython-311.pyc
                connection.cpython-311.pyc
                           connectionpool.cpython-311.pyc
                           exceptions.cpython-311.pyc
                           fields.cpython-311.pyc
                           filepost.cpython-311.pyc
                           poolmanager.cpython-311.pyc
                           request.cpython-311.pyc
                           response.cpython-311.pyc
                           _collections.cpython-311.pyc
                           version.cpython-311.pyc
                           __init__.cpython-311.pyc
                \---__pycache__
                       typing extensions.cpython-311.pyc
                        __init__.cpython-311.pyc
          \---__pycache__
                    __init__.cpython-311.pyc
                    __main__.cpython-311.pyc
                    pip-runner .cpython-311.pyc
          +---pip-25.0.1.dist-info
                 AUTHORS.txt
          1
                 entry_points.txt
                 INSTALLER
                 LICENSE.txt
                 METADATA
                 RECORD
                 REQUESTED
                 top_level.txt
                 WHEEL
          +---pkg resources
          | +---extern
          1 1 1
                \---_pycache__
                        __init__.cpython-311.pyc
Ī
          | +---_vendor
          | | appdirs.py
             | | zipp.py
                | __init__.py
```

```
| +---importlib_resources
         | | readers.py
                      simple.py
_adapters.py
                     common.py
1
                      _compat.py
                      itertools.py
                     _legacy.py
                      __init__.py
               | \---__pycache__
                         abc.cpython-311.pyc
                         readers.cpython-311.pyc
                         simple.cpython-311.pyc
                         _adapters.cpython-311.pyc
                         _common.cpython-311.pyc
Ī
                         _compat.cpython-311.pyc
                         _itertools.cpython-311.pyc
                         _legacy.cpython-311.pyc
                          __init__.cpython-311.pyc
1
               +---jaraco
            | | context.py
               | | functools.py
                      __init__.py
              Ī
               | +---text
               | \---_pycache__
                             __init__.cpython-311.pyc
               | \---__pycache__
                         context.cpython-311.pyc
                         functools.cpython-311.pyc
                         __init__.cpython-311.pyc
               +---more_itertools
               | | recipes.py
1
                     __init__.py
               \---__pycache__
                         more.cpython-311.pyc
                         recipes.cpython-311.pyc
Ī
                         __init__.cpython-311.pyc
         1 1
         | | +---packaging
         | | | markers.py
        | | | requirements.py
```

```
specifiers.py
       tags.py
       utils.py
       version.py
       _manylinux.py
       musllinux.py
       _structures.py
       __about__.py
       __init__.py
   \---__pycache__
           markers.cpython-311.pyc
           requirements.cpython-311.pyc
           specifiers.cpython-311.pyc
           tags.cpython-311.pyc
           utils.cpython-311.pyc
           version.cpython-311.pyc
           _manylinux.cpython-311.pyc
           musllinux.cpython-311.pyc
           _structures.cpython-311.pyc
           about .cpython-311.pyc
           __init__.cpython-311.pyc
+---pyparsing
       actions.py
       common.py
       core.py
       exceptions.py
       helpers.py
       results.py
       testing.py
       unicode.py
       util.py
       __init__.py
   +---diagram
   \---__pycache__
               init .cpython-311.pyc
   \---_pycache__
           actions.cpython-311.pyc
           common.cpython-311.pyc
           core.cpython-311.pyc
           exceptions.cpython-311.pyc
           helpers.cpython-311.pyc
           results.cpython-311.pyc
           testing.cpython-311.pyc
           unicode.cpython-311.pyc
           util.cpython-311.pyc
```

```
__init__.cpython-311.pyc
               \---__pycache__
                      appdirs.cpython-311.pyc
zipp.cpython-311.pyc
                       __init__.cpython-311.pyc
             \---_pycache__
                   __init__.cpython-311.pyc
         +---proto
         | datetime_helpers.py
         1
            | enums.py
                fields.py
                message.py
               modules.py
               primitives.py
Ī
         utils.py
                version.py
         _file_info.py
                package info.py
         __init__.py
1
         +---marshal
               | compat.py
                  marshal.py
                   __init__.py
Ī
               - 1
               +---collections
               | | maps.py
                | repeated.py
               | | __init__.py
               1 1
                  \---__pycache__
                          maps.cpython-311.pyc
                          repeated.cpython-311.pyc
                          __init__.cpython-311.pyc
               +---rules
               | | bytes.py
               | | dates.py
Τ
                       enums.py
               | | field_mask.py
                      message.py
                      stringy_numbers.py
               | | struct.py
Ī
               | | wrappers.py
               __init__.py
         1 1
               bytes.cpython-311.pyc
```

```
dates.cpython-311.pyc
                   enums.cpython-311.pyc
                    field_mask.cpython-311.pyc
                   message.cpython-311.pyc
                   stringy_numbers.cpython-311.pyc
                   struct.cpython-311.pyc
                   wrappers.cpython-311.pyc
                    init .cpython-311.pyc
       \---_pycache_
               compat.cpython-311.pyc
               marshal.cpython-311.pyc
                init .cpython-311.pyc
    \--- pycache
           datetime_helpers.cpython-311.pyc
            enums.cpython-311.pyc
            fields.cpython-311.pyc
            message.cpython-311.pyc
           modules.cpython-311.pyc
           primitives.cpython-311.pyc
           utils.cpython-311.pyc
            version.cpython-311.pyc
            _file_info.cpython-311.pyc
            package info.cpython-311.pyc
            __init__.cpython-311.pyc
+---protobuf-6.30.1.dist-info
       INSTALLER
        LICENSE
       METADATA
        RECORD
        WHEEL
+---proto_plus-1.26.1.dist-info
        INSTALLER
       LICENSE
       METADATA
       RECORD
        top level.txt
        WHEEL
+---psutil
       _common.py
        _psaix.py
       _psbsd.py
_pslinux.py
_psosx.py
_psposix.py
        _pssunos.py
       psutil windows.pyd
```

```
_pswindows.py
   __init__.py
+---tests
  test_aix.py
       test bsd.py
        test_connections.py
       test contracts.py
       test_linux.py
        test_memleaks.py
       test misc.py
        test_osx.py
        test posix.py
        test_process.py
       test process all.py
       test_scripts.py
       test_sunos.py
       test_system.py
       test testutils.py
       test_unicode.py
        test windows.py
       __init__.py
        main .py
   \--- pycache
           test_aix.cpython-311.pyc
            test_bsd.cpython-311.pyc
            test connections.cpython-311.pyc
            test_contracts.cpython-311.pyc
            test linux.cpython-311.pyc
            test_memleaks.cpython-311.pyc
            test_misc.cpython-311.pyc
            test_osx.cpython-311.pyc
            test_posix.cpython-311.pyc
            test_process.cpython-311.pyc
            test_process_all.cpython-311.pyc
            test_scripts.cpython-311.pyc
            test sunos.cpython-311.pyc
            test_system.cpython-311.pyc
            test testutils.cpython-311.pyc
            test_unicode.cpython-311.pyc
            test_windows.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
\---_pycache__
       common.cpython-311.pyc
       _psaix.cpython-311.pyc
       _psbsd.cpython-311.pyc
       _pslinux.cpython-311.pyc
       psosx.cpython-311.pyc
```

```
_psposix.cpython-311.pyc
                    _pssunos.cpython-311.pyc
                    _pswindows.cpython-311.pyc
                    __init__.cpython-311.pyc
          +---psutil-7.0.0.dist-info
                 INSTALLER
                 LICENSE
                 METADATA
                 RECORD
                 top_level.txt
                 WHEEL
          1
          +---pyasn1
                debug.py
               error.py
                 __init__.py
             +---codec
            | | streaming.py
                | __init__.py
               +---ber
               | | decoder.py
                 | | encoder.py
                      eoo.py
                      __init__.py
                   \---__pycache__
                           decoder.cpython-311.pyc
                           encoder.cpython-311.pyc
                           eoo.cpython-311.pyc
                           __init__.cpython-311.pyc
                +---cer
                | | decoder.py
                | | encoder.py
                       __init__.py
                \--- pycache
                           decoder.cpython-311.pyc
                           encoder.cpython-311.pyc
                           __init__.cpython-311.pyc
                +---der
               | | decoder.py
Ī
                | | encoder.py
                | \---__pycache__
                           decoder.cpython-311.pyc
```

```
encoder.cpython-311.pyc
                __init__.cpython-311.pyc
   +---native
   | | decoder.py
           encoder.py
            __init__.py
        \---__pycache__
                decoder.cpython-311.pyc
                encoder.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
            streaming.cpython-311.pyc
            __init__.cpython-311.pyc
+---compat
   | integer.py
      __init__.py
   \---__pycache__
            integer.cpython-311.pyc
            __init__.cpython-311.pyc
+---type
   base.py
        char.py
        constraint.py
    1
        error.py
        namedtype.py
        namedval.py
        opentype.py
        tag.py
        tagmap.py
        univ.py
        useful.py
        __init__.py
    \--- pycache
            base.cpython-311.pyc
            char.cpython-311.pyc
            constraint.cpython-311.pyc
            error.cpython-311.pyc
            namedtype.cpython-311.pyc
            namedval.cpython-311.pyc
            opentype.cpython-311.pyc
            tag.cpython-311.pyc
            tagmap.cpython-311.pyc
            univ.cpython-311.pyc
            useful.cpython-311.pyc
```

```
__init__.cpython-311.pyc
           \---_pycache__
                       debug.cpython-311.pyc
                       error.cpython-311.pyc
                       __init__.cpython-311.pyc
           +---pyasn1-0.6.1.dist-info
                   INSTALLER
           1
                   LICENSE.rst
                   METADATA
                   RECORD
                   top level.txt
           1
                   WHEEL
           zip-safe
           +---pyasn1_modules
                   pem.py
                   rfc1155.py
                   rfc1157.py
                   rfc1901.py
                   rfc1902.py
           rfc1905.py
                   rfc2251.py
                   rfc2314.py
                   rfc2315.py
                   rfc2437.py
                   rfc2459.py
                   rfc2511.py
           1
                   rfc2560.py
                   rfc2631.py
           1
                   rfc2634.py
                   rfc2876.py
           rfc2985.py
           rfc2986.py
                   rfc3058.py
                   rfc3114.py
                   rfc3125.py
                   rfc3161.py
                   rfc3274.py
                   rfc3279.py
           rfc3280.py
           rfc3281.py
                   rfc3370.py
                   rfc3412.py
           1
           rfc3414.py
Ī
                   rfc3447.py
                   rfc3537.py
           rfc3560.py
                   rfc3565.py
                   rfc3657.py
```

I	I			rfc3709.py
I	I			rfc3739.py
I	I		I	rfc3770.py
I	I			rfc3779.py
I	I			rfc3820.py
I	I			rfc3852.py
I	I		I	rfc4010.py
I	I		I	rfc4043.py
I	I		I	rfc4055.py
I	I	I	I	rfc4073.py
ı	I	1	I	rfc4108.py
ı	I	ı	I	rfc4210.py
ı	I	ı	ı	rfc4211.py
ı	1	ı	ı	rfc4334.py
i I	· 	i I	i I	rfc4357.py
	· 		I	rfc4387.py
I	' 		' 	rfc4476.py
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				rfc5280.py
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				rfc5636.py
				rfc5639.py
1				rfc5649.py
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I	I	1	ı	rfc5697.py
I	1		I	rfc5751.py
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I	1		I	rfc6019.py
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           rfc8769.py
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                   __init__.py
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                      pem.cpython-311.pyc
           rfc1155.cpython-311.pyc
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        color.py
        config.py
        dataclasses.py
        datetime_parse.py
        decorator.py
env settings.py
        errors.py
        error wrappers.py
```

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generics.py
json.py
       json_schema.py
       {\tt main.py}
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       networks.py
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tools.py
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       type_adapter.py
       typing.py
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       decorator.py
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        error wrappers.py
        fields.py
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        json.py
       main.py
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            errors.cpython-311.pyc
```

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            __init__.cpython-311.pyc
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        top_level.txt
        WHEEL
        zip-safe
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        api.py
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compat.py
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       exceptions.py
       help.py
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        sessions.py
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cli.py
       common.py
       core.py
key.py
       parallel.py
pem.py
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pkcs1.py
       pkcs1_v2.py
       prime.py
       py.typed
       randnum.py
        transform.py
       util.py
        init .py
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            prime.cpython-311.pyc
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            util.cpython-311.pyc
            __init__.cpython-311.pyc
+---rsa-4.9.dist-info
       entry_points.txt
       INSTALLER
       LICENSE
       METADATA
       RECORD
        WHEEL
+---scipy
       conftest.py
       version.py
       _distributor_init.py
       __config__.py
        __init__.py
   +---cluster
           hierarchy.py
           vq.py
           _hierarchy.cp311-win_amd64.dll.a
           hierarchy.cp311-win amd64.pyd
           _optimal_leaf_ordering.cp311-win_amd64.dll.a
           _optimal_leaf_ordering.cp311-win_amd64.pyd
           _vq.cp311-win_amd64.dll.a
           _vq.cp311-win_amd64.pyd
           __init__.py
```

```
| | +---tests
        | | | hierarchy_test_data.py
         | | test_disjoint_set.py
             | | test_hierarchy.py
1
              | \---__pycache__
                       hierarchy_test_data.cpython-311.pyc
                       test_disjoint_set.cpython-311.pyc
                       test_hierarchy.cpython-311.pyc
                       test_vq.cpython-311.pyc
                        __init__.cpython-311.pyc
             \---_pycache__
                   hierarchy.cpython-311.pyc
                    vq.cpython-311.pyc
                    __init__.cpython-311.pyc
        | +---constants
        | | codata.py
        | | constants.py
                 codata.py
          | constants.py
              | init .py
        | | +---tests
          | | test_codata.py
             | | test_constants.py
             | \---__pycache__
                      test_codata.cpython-311.pyc
                       test constants.cpython-311.pyc
                        __init__.cpython-311.pyc
        | \---_pycache__
                    codata.cpython-311.pyc
                    constants.cpython-311.pyc
                    codata.cpython-311.pyc
                    _constants.cpython-311.pyc
                     __init__.cpython-311.pyc
        | +---datasets
        | | _download_all.py
        | | _fetchers.py
I
             | _registry.py
        | | | _utils.py
        1 1 1
  | | +---tests
```

```
| | | test_data.py
 test_data.cpython-311.pyc
              __init__.cpython-311.pyc
 | \---_pycache__
           _download_all.cpython-311.pyc
           _fetchers.cpython-311.pyc
           _registry.cpython-311.pyc
           _utils.cpython-311.pyc
           __init__.cpython-311.pyc
 | +---differentiate
 | | _differentiate.py
   | | test_differentiate.py
 | \---__pycache__
            test_differentiate.cpython-311.pyc
              init .cpython-311.pyc
 | \---_pycache__
          differentiate.cpython-311.pyc
           __init__.cpython-311.pyc
 1 1
 | +---fft
 | | _backend.py
   | | _basic.py
     | _basic_backend.py
 | | debug_backends.py
     | fftlog.py
     | _fftlog_backend.py
     | helper.py
     realtransforms.py
     | realtransforms backend.py
     | __init__.py
 | | mock_backend.py
     | | test backend.py
 | | | test_basic.py
     | | test_fftlog.py
  | | test_helper.py
 | | | test multithreading.py
```

```
\--- pycache
                   mock_backend.cpython-311.pyc
                   test backend.cpython-311.pyc
                   test_basic.cpython-311.pyc
                   test fftlog.cpython-311.pyc
                   test_helper.cpython-311.pyc
                   test multithreading.cpython-311.pyc
                   test_real_transforms.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---_pocketfft
      | | basic.py
              helper.py
              LICENSE.md
          | pypocketfft.cp311-win_amd64.dll.a
             pypocketfft.cp311-win_amd64.pyd
              realtransforms.py
               __init__.py
      | +---tests
      | | test_basic.py
             | test real transforms.py
                  __init__.py
              \---__pycache__
                       test_basic.cpython-311.pyc
                      test real transforms.cpython-311.pyc
                       __init__.cpython-311.pyc
          \---__pycache__
                   basic.cpython-311.pyc
                   helper.cpython-311.pyc
                   realtransforms.cpython-311.pyc
                   __init__.cpython-311.pyc
      \---__pycache__
               backend.cpython-311.pyc
               _basic.cpython-311.pyc
               basic backend.cpython-311.pyc
               _debug_backends.cpython-311.pyc
               _fftlog.cpython-311.pyc
               _fftlog_backend.cpython-311.pyc
               _helper.cpython-311.pyc
               _realtransforms.cpython-311.pyc
               _realtransforms_backend.cpython-311.pyc
               __init__.cpython-311.pyc
   +---fftpack
      | basic.py
| | convolve.cp311-win amd64.dll.a
```

```
convolve.cp311-win_amd64.pyd
       helper.py
       pseudo_diffs.py
realtransforms.py
        _basic.py
        helper.py
        _pseudo_diffs.py
        realtransforms.py
        __init__.py
    +---tests
           fftw_double_ref.npz
            fftw longdouble ref.npz
           fftw_single_ref.npz
           test.npz
           test_basic.py
           test_helper.py
           test_import.py
           test_pseudo_diffs.py
           test_real_transforms.py
            init .py
       \--- pycache
                test_basic.cpython-311.pyc
               test helper.cpython-311.pyc
               test_import.cpython-311.pyc
               test_pseudo_diffs.cpython-311.pyc
               test real transforms.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
           basic.cpython-311.pyc
           helper.cpython-311.pyc
           pseudo diffs.cpython-311.pyc
           realtransforms.cpython-311.pyc
            basic.cpython-311.pyc
            _helper.cpython-311.pyc
            pseudo diffs.cpython-311.pyc
            _realtransforms.cpython-311.pyc
            init .cpython-311.pyc
+---integrate
       dop.py
        lsoda.py
        odepack.py
       quadpack.py
        vode.py
        _bvp.py
cubature.py
        _dop.cp311-win_amd64.dll.a
       dop.cp311-win amd64.pyd
```

```
_lebedev.py
     _lsoda.cp311-win_amd64.dll.a
     _lsoda.cp311-win_amd64.pyd
     ode.py
     _odepack.cp311-win_amd64.dll.a
     odepack.cp311-win amd64.pyd
     _odepack_py.py
     quadpack.cp311-win amd64.dll.a
     _quadpack.cp311-win_amd64.pyd
     _quadpack_py.py
     _quadrature.py
     _quad_vec.py
     tanhsinh.py
     _test_multivariate.cp311-win_amd64.dll.a
     test multivariate.cp311-win amd64.pyd
     _test_odeint_banded.cp311-win_amd64.dll.a
     _test_odeint_banded.cp311-win_amd64.pyd
     _vode.cp311-win_amd64.dll.a
     _vode.cp311-win_amd64.pyd
     __init__.py
 +---tests
         test_banded_ode_solvers.py
         test_bvp.py
         test cubature.py
         test_integrate.py
         test_odeint_jac.py
         test_quadpack.py
         test_quadrature.py
         test tanhsinh.py
         test__quad_vec.py
         __init__.py
     \---__pycache__
             test_banded_ode_solvers.cpython-311.pyc
             test_bvp.cpython-311.pyc
             test_cubature.cpython-311.pyc
             test integrate.cpython-311.pyc
             test_odeint_jac.cpython-311.pyc
             test quadpack.cpython-311.pyc
             test_quadrature.cpython-311.pyc
             test_tanhsinh.cpython-311.pyc
             test__quad_vec.cpython-311.pyc
             __init__.cpython-311.pyc
 +---_ivp
    base.py
         bdf.py
 -
         common.py
         dop853_coefficients.py
ivp.py
```

```
lsoda.py
       radau.py
       rk.py
       __init__.py
    +---tests
  test_ivp.py
           test rk.py
           __init__.py
       \---_pycache_
               test_ivp.cpython-311.pyc
               test rk.cpython-311.pyc
               __init__.cpython-311.pyc
    \---__pycache__
           base.cpython-311.pyc
           bdf.cpython-311.pyc
           common.cpython-311.pyc
           dop853_coefficients.cpython-311.pyc
           ivp.cpython-311.pyc
           lsoda.cpython-311.pyc
           radau.cpython-311.pyc
           rk.cpython-311.pyc
            init .cpython-311.pyc
+---_rules
       _base.py
  - 1
       _gauss_kronrod.py
       _gauss_legendre.py
       _genz_malik.py
       __init__.py
   \---__pycache__
           _base.cpython-311.pyc
           _gauss_kronrod.cpython-311.pyc
           _gauss_legendre.cpython-311.pyc
           genz malik.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
       dop.cpython-311.pyc
       lsoda.cpython-311.pyc
        odepack.cpython-311.pyc
       quadpack.cpython-311.pyc
       vode.cpython-311.pyc
       _bvp.cpython-311.pyc
       _cubature.cpython-311.pyc
        _lebedev.cpython-311.pyc
        _ode.cpython-311.pyc
        odepack py.cpython-311.pyc
```

```
_quadpack_py.cpython-311.pyc
               _quadrature.cpython-311.pyc
               _quad_vec.cpython-311.pyc
               _tanhsinh.cpython-311.pyc
               __init__.cpython-311.pyc
   +---interpolate
           dfitpack.py
           fitpack.py
            fitpack2.py
           interpnd.py
           interpolate.py
           ndgriddata.py
           polyint.py
           rbf.py
           _bary_rational.py
           _bspl.cp311-win_amd64.dll.a
           _bspl.cp311-win_amd64.pyd
           bsplines.py
           _cubic.py
           dfitpack.cp311-win amd64.dll.a
           _dfitpack.cp311-win_amd64.pyd
           dierckx.cp311-win amd64.dll.a
           _dierckx.cp311-win_amd64.pyd
           fitpack.cp311-win amd64.dll.a
           _fitpack.cp311-win_amd64.pyd
           _fitpack2.py
           _fitpack_impl.py
           _fitpack_py.py
           fitpack repro.py
           _interpnd.cp311-win_amd64.dll.a
           _interpnd.cp311-win_amd64.pyd
           _interpolate.py
           ndbspline.py
           _ndgriddata.py
           pade.py
           _polyint.py
           ppoly.cp311-win amd64.dll.a
           _ppoly.cp311-win_amd64.pyd
           rbf.py
           _rbfinterp.py
           _rbfinterp_pythran.cp311-win_amd64.dll.a
           _rbfinterp_pythran.cp311-win_amd64.pyd
           _rgi.py
           rgi cython.cp311-win amd64.dll.a
           _rgi_cython.cp311-win_amd64.pyd
           __init__.py
       +---tests
      | test_bary_rational.py
| | | test bsplines.py
```

```
test_fitpack.py
        test_fitpack2.py
       test_gil.py
        test interpnd.py
        test_interpolate.py
        test ndgriddata.py
        test_pade.py
        test polyint.py
        test_rbf.py
        test_rbfinterp.py
        test rgi.py
        _init__.py
   +---data
           bug-1310.npz
           estimate_gradients_hang.npy
            gcvspl.npz
    \---_pycache__
            test_bary_rational.cpython-311.pyc
            test bsplines.cpython-311.pyc
            test_fitpack.cpython-311.pyc
            test fitpack2.cpython-311.pyc
            test_gil.cpython-311.pyc
            test interpnd.cpython-311.pyc
            test interpolate.cpython-311.pyc
            test_ndgriddata.cpython-311.pyc
            test pade.cpython-311.pyc
            test_polyint.cpython-311.pyc
            test rbf.cpython-311.pyc
            test_rbfinterp.cpython-311.pyc
            test rgi.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache_
        dfitpack.cpython-311.pyc
        fitpack.cpython-311.pyc
        fitpack2.cpython-311.pyc
        interpnd.cpython-311.pyc
        interpolate.cpython-311.pyc
        ndgriddata.cpython-311.pyc
        polyint.cpython-311.pyc
        rbf.cpython-311.pyc
        _bary_rational.cpython-311.pyc
        bsplines.cpython-311.pyc
        _cubic.cpython-311.pyc
        _fitpack2.cpython-311.pyc
        _fitpack_impl.cpython-311.pyc
        _fitpack_py.cpython-311.pyc
        _fitpack_repro.cpython-311.pyc
        interpolate.cpython-311.pyc
```

```
_ndbspline.cpython-311.pyc
           _ndgriddata.cpython-311.pyc
           _pade.cpython-311.pyc
           _polyint.cpython-311.pyc
           _rbf.cpython-311.pyc
           rbfinterp.cpython-311.pyc
           _rgi.cpython-311.pyc
           init .cpython-311.pyc
+---io
       harwell boeing.py
       idl.py
       mmio.py
       netcdf.py
       wavfile.py
       _fortran.py
       idl.py
       _mmio.py
       netcdf.py
       _test_fortran.cp311-win_amd64.dll.a
       test fortran.cp311-win amd64.pyd
       __init__.py
    +---arff
       | arffread.py
           _arffread.py
           __init__.py
       +---tests
      | | test arffread.py
              __init__.py
      | +---data
                   iris.arff
                   missing.arff
                   nodata.arff
                   quoted_nominal.arff
                   quoted nominal spaces.arff
                   test1.arff
                   test10.arff
                   test11.arff
                   test2.arff
                   test3.arff
                   test4.arff
                   test5.arff
                   test6.arff
                   test7.arff
                   test8.arff
                   test9.arff
```

```
test_arffread.cpython-311.pyc
                __init__.cpython-311.pyc
   \---__pycache__
           arffread.cpython-311.pyc
            arffread.cpython-311.pyc
            __init__.cpython-311.pyc
+---matlab
        byteordercodes.py
        mio.py
        mio4.py
        mio5.py
        mio5_params.py
        mio5 utils.py
        miobase.py
        mio utils.py
        streams.py
        _byteordercodes.py
        _mio.py
        mio4.py
        _mio5.py
        mio5 params.py
        _mio5_utils.cp311-win_amd64.dll.a
        mio5 utils.cp311-win amd64.pyd
        _miobase.py
        _mio_utils.cp311-win_amd64.dll.a
        mio utils.cp311-win amd64.pyd
        _streams.cp311-win_amd64.dll.a
        streams.cp311-win amd64.pyd
        __init__.py
   +---tests
            test_byteordercodes.py
            test_mio.py
            test_mio5_utils.py
            test_miobase.py
            test mio funcs.py
            test_mio_utils.py
            test pathological.py
            test_streams.py
            __init__.py
        +---data
                bad miuint32.mat
                bad_miutf8_array_name.mat
                big endian.mat
                broken_utf8.mat
                corrupted zlib checksum.mat
                corrupted_zlib_data.mat
                debigged m4.mat
```

ı		l	ı	I	l	I	japanese utf8.txt
ı		l	ı	ı	ı	1	little endian.mat
	·	I	I	i I	i I	· 	logical sparse.mat
	·				i I	· 	malformed1.mat
	·				i I	· 	miuint32 for miint32.mat
	·	I	I		i I	· 	miutf8 array name.mat
			I		· I	I	nasty_duplicate_fieldnames.mat
					I	' I	one by zero char.mat
		' I	I		' I	' 	parabola.mat
			I		I	' 	single empty string.mat
					I	' I	some functions.mat
			' 		' 	' 	sqr.mat
					' 	1	test3dmatrix 6.1 SOL2.mat
			· 		' 	1	test3dmatrix 6.5.1 GLNX86.mat
	'				' 	1	test3dmatrix 7.1 GLNX86.mat
	'		l		 	1	test3dmatrix 7.4 GLNX86.mat
	'					1	
	,						testbool_8_WIN64.mat
							testcellnest_6.1_SOL2.mat
						1	testcellnest_6.5.1_GLNX86.mat
							testcellnest_7.1_GLNX86.mat
							testcellnest_7.4_GLNX86.mat
							testcell_6.1_SOL2.mat
							testcell_6.5.1_GLNX86.mat
							testcell_7.1_GLNX86.mat
							testcell_7.4_GLNX86.mat
							testcomplex_4.2c_SOL2.mat
							testcomplex_6.1_SOL2.mat
- 1					1		testcomplex_6.5.1_GLNX86.mat
- 1			1		1		testcomplex_7.1_GLNX86.mat
ı			I	l	l		testcomplex_7.4_GLNX86.mat
- 1	١		I	l	I		testdouble_4.2c_SOL2.mat
I	I		I	I			testdouble_6.1_SOL2.mat
I	I		I	I	I		testdouble_6.5.1_GLNX86.mat
I	١		I		l		testdouble_7.1_GLNX86.mat
- 1	ı		I				testdouble_7.4_GLNX86.mat
- 1	ı		I				testemptycell_5.3_SOL2.mat
- 1	١		I	I	I		testemptycell_6.5.1_GLNX86.mat
- 1	1	l		I			testemptycell_7.1_GLNX86.mat
I	I		I				testemptycell_7.4_GLNX86.mat
- 1	ı	l	I	l			testfunc_7.4_GLNX86.mat
- 1	١	l	I	I	I		testhdf5_7.4_GLNX86.mat
- 1	ı	l	I	I	I		testmatrix_4.2c_SOL2.mat
I	I	l	I	l	I		testmatrix_6.1_SOL2.mat
I	I	l	I	I			testmatrix_6.5.1_GLNX86.mat
- 1	1	l	l	I			testmatrix_7.1_GLNX86.mat
	ı	l	l	I			testmatrix_7.4_GLNX86.mat
- 1	ı	l	l	I		1	testminus_4.2c_SOL2.mat
I	ı	I	I	I		1	testminus_6.1_SOL2.mat
I	ı	I	I	I		1	testminus_6.5.1_GLNX86.mat
- 1	ı	l	l	I		1	testminus_7.1_GLNX86.mat
- 1	I	I	I	I	l		testminus_7.4_GLNX86.mat

```
testmulti_4.2c_SOL2.mat
testmulti 7.1 GLNX86.mat
testmulti_7.4_GLNX86.mat
testobject 6.1 SOL2.mat
testobject_6.5.1_GLNX86.mat
testobject 7.1 GLNX86.mat
testobject_7.4_GLNX86.mat
testonechar 4.2c SOL2.mat
testonechar_6.1_SOL2.mat
testonechar_6.5.1_GLNX86.mat
testonechar 7.1 GLNX86.mat
testonechar_7.4_GLNX86.mat
testscalarcell 7.4 GLNX86.mat
testsimplecell.mat
testsparsecomplex 4.2c SOL2.mat
testsparsecomplex_6.1_SOL2.mat
testsparsecomplex 6.5.1 GLNX86.mat
testsparsecomplex_7.1_GLNX86.mat
testsparsecomplex 7.4 GLNX86.mat
testsparsefloat_7.4_GLNX86.mat
testsparse 4.2c SOL2.mat
testsparse_6.1_SOL2.mat
testsparse 6.5.1 GLNX86.mat
testsparse_7.1_GLNX86.mat
testsparse 7.4 GLNX86.mat
teststringarray_4.2c_SOL2.mat
teststringarray_6.1_SOL2.mat
teststringarray 6.5.1 GLNX86.mat
{\tt teststringarray\_7.1\_GLNX86.mat}
teststringarray 7.4 GLNX86.mat
teststring_4.2c_SOL2.mat
teststring 6.1 SOL2.mat
teststring_6.5.1_GLNX86.mat
teststring_7.1_GLNX86.mat
teststring_7.4_GLNX86.mat
teststructarr 6.1 SOL2.mat
teststructarr_6.5.1_GLNX86.mat
teststructarr 7.1 GLNX86.mat
teststructarr_7.4_GLNX86.mat
teststructnest 6.1 SOL2.mat
teststructnest_6.5.1_GLNX86.mat
teststructnest_7.1_GLNX86.mat
teststructnest_7.4_GLNX86.mat
teststruct_6.1_SOL2.mat
teststruct_6.5.1_GLNX86.mat
teststruct_7.1_GLNX86.mat
teststruct_7.4_GLNX86.mat
testunicode_7.1_GLNX86.mat
testunicode 7.4 GLNX86.mat
testvec_4_GLNX86.mat
test empty struct.mat
```

```
test_mat4_le_floats.mat
                test skip variable.mat
       \---_pycache_
                test_byteordercodes.cpython-311.pyc
                test mio.cpython-311.pyc
                test_mio5_utils.cpython-311.pyc
                test miobase.cpython-311.pyc
                test_mio_funcs.cpython-311.pyc
                test_mio_utils.cpython-311.pyc
                test pathological.cpython-311.pyc
                test_streams.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache_
           byteordercodes.cpython-311.pyc
            mio.cpython-311.pyc
            mio4.cpython-311.pyc
            mio5.cpython-311.pyc
            mio5_params.cpython-311.pyc
            mio5 utils.cpython-311.pyc
            miobase.cpython-311.pyc
            mio utils.cpython-311.pyc
            streams.cpython-311.pyc
            byteordercodes.cpython-311.pyc
            _mio.cpython-311.pyc
            _mio4.cpython-311.pyc
            mio5.cpython-311.pyc
            _mio5_params.cpython-311.pyc
            miobase.cpython-311.pyc
            __init__.cpython-311.pyc
+---tests
        test fortran.py
        test_idl.py
        test mmio.py
        test_netcdf.py
        test paths.py
       test_wavfile.py
        init .py
   +---data
            array_float32_1d.sav
            array_float32_2d.sav
            array float32 3d.sav
            array_float32_4d.sav
            array_float32_5d.sav
            array_float32_6d.sav
            array_float32_7d.sav
            array_float32_8d.sav
            array float32 pointer 1d.sav
```

-	I	- 1	- 1	- 1	1	array_float32_pointer_2d.sav
	I	- 1	I	I	1	array_float32_pointer_3d.sav
	I	- 1	I	I	1	array_float32_pointer_4d.sav
	I	- 1	I	I	1	array_float32_pointer_5d.sav
	- 1	1	- 1	- 1	1	array_float32_pointer_6d.sav
- 1	- 1	- 1	- 1	-	1	array_float32_pointer_7d.sav
-	1	-	- 1	-	1	array_float32_pointer_8d.sav
-	1	-	- 1	-	1	example_1.nc
	- 1	1	- 1	- 1	1	example_2.nc
	- 1	1	- 1	- 1	1	example_3_maskedvals.nc
- 1	- 1	- 1	- 1	-	1	fortran-3x3d-2i.dat
- 1	- 1	- 1	- 1	-	1	fortran-mixed.dat
-	1	-	I	I	1	fortran-sf8-11x1x10.dat
	I	1	- 1	- 1	1	fortran-sf8-15x10x22.dat
	I	1	- 1	- 1	1	fortran-sf8-1x1x1.dat
	1	1	- 1	-	1	fortran-sf8-1x1x5.dat
-	- 1	1	- 1	-	1	fortran-sf8-1x1x7.dat
	1	1	- 1	1	1	fortran-sf8-1x3x5.dat
-	I	1	- 1	1	1	fortran-si4-11x1x10.dat
	1	1	- 1	1	1	fortran-si4-15x10x22.dat
	I	1	- 1	1	1	fortran-si4-1x1x1.dat
	I	1	- 1	1	1	fortran-si4-1x1x5.dat
1	1	1	-	1	1	fortran-si4-1x1x7.dat
-	1	1	1	1	1	fortran-si4-1x3x5.dat
-	1	1	1	1	1	invalid_pointer.sav
-	1	1	1	1	1	null_pointer.sav
	1	1	1	I	T	scalar_byte.sav
-	1	1	1	1	1	scalar_byte_descr.sav
1	1	1	1	1	1	scalar_complex32.sav
	1	1	1	I	T	scalar_complex64.sav
-	1	1	1	1	1	scalar_float32.sav
	I	1	1	1	1	scalar_float64.sav
	I	1	1	1	1	scalar_heap_pointer.sav
1	I	1	1	ı	1	scalar_int16.sav
-	I	1	1	ı	1	scalar_int32.sav
I	I	1	1	I	1	scalar_int64.sav
-	I	1	1	ı	1	scalar_string.sav
-	I	1	1	ı	1	scalar_uint16.sav
I	I	1	I	ı	1	scalar_uint32.sav
I	I	1	I	ı	1	scalar_uint64.sav
I	I	1	1	ı	1	struct_arrays.sav
I	I	1	1	ı	T	struct_arrays_byte_idl80.sav
ı	I	1	1	ı	ı	struct_arrays_replicated.sav
ı	I	1	Ī	Ī	I	struct_arrays_replicated_3d.sav
I	1	I	I	Ī	I	struct_inherit.sav
I	I	1	1	ı	1	struct_pointers.sav
ı	I	1	Ī	Ī	I	struct_pointers_replicated.sav
ı	I	1	1	Ī	1	struct_pointers_replicated_3d.sav
1	ı	1	1	i	ı	struct_pointer_arrays.sav
ı	I	1	Ī	Ī	I	struct_pointer_arrays_replicated.sav
ı	I	1	Ī	Ī	1	struct_pointer_arrays_replicated_3d.sav

```
struct_scalars.sav
            struct scalars replicated.sav
            struct_scalars_replicated_3d.sav
             test-1234Hz-le-1ch-10S-20bit-extra.wav
             test-44100Hz-2ch-32bit-float-be.wav
             test-44100Hz-2ch-32bit-float-le.wav
             test-44100Hz-be-1ch-4bytes.wav
             test-44100Hz-le-1ch-4bytes-early-eof-no-data.wav
             test-44100Hz-le-1ch-4bytes-early-eof.wav
             test-44100Hz-le-1ch-4bytes-incomplete-chunk.wav
             test-44100Hz-le-1ch-4bytes-rf64.wav
             test-44100Hz-le-1ch-4bytes.wav
             test-48000Hz-2ch-64bit-float-le-wavex.wav
             test-8000Hz-be-3ch-5S-24bit.wav
             test-8000Hz-le-1ch-1byte-ulaw.wav
             test-8000Hz-le-2ch-1byteu.wav
             test-8000Hz-le-3ch-5S-24bit-inconsistent.wav
             test-8000Hz-le-3ch-5S-24bit-rf64.wav
             test-8000Hz-le-3ch-5S-24bit.wav
             test-8000Hz-le-3ch-5S-36bit.wav
             test-8000Hz-le-3ch-5S-45bit.wav
             test-8000Hz-le-3ch-5S-53bit.wav
             test-8000Hz-le-3ch-5S-64bit.wav
             test-8000Hz-le-4ch-9S-12bit.wav
             test-8000Hz-le-5ch-9S-5bit.wav
            Transparent Busy.ani
            various_compressed.sav
    \---__pycache__
            test fortran.cpython-311.pyc
             test_idl.cpython-311.pyc
            test mmio.cpython-311.pyc
            test_netcdf.cpython-311.pyc
            test paths.cpython-311.pyc
            test_wavfile.cpython-311.pyc
             init .cpython-311.pyc
 +--- fast matrix market
   | _fmm_core.cp311-win_amd64.dll.a
       fmm core.cp311-win amd64.pyd
        __init__.py
| \---_pycache_
            __init__.cpython-311.pyc
+---_harwell_boeing
   | hb.py
        _fortran_format_parser.py
        __init__.py
| +---tests
```

```
test_fortran_format.py
               test hb.py
   1 1 1
               __init__.py
           \---_pycache_
                   test fortran format.cpython-311.pyc
                   test_hb.cpython-311.pyc
                   init .cpython-311.pyc
       \---_pycache_
               hb.cpython-311.pyc
               _fortran_format_parser.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache_
           harwell_boeing.cpython-311.pyc
           idl.cpython-311.pyc
           mmio.cpython-311.pyc
           netcdf.cpython-311.pyc
           wavfile.cpython-311.pyc
            fortran.cpython-311.pyc
            _idl.cpython-311.pyc
            mmio.cpython-311.pyc
            _netcdf.cpython-311.pyc
            init .cpython-311.pyc
+---linalg
    1
       basic.py
       blas.py
        cython blas.cp311-win amd64.dll.a
       cython_blas.cp311-win_amd64.pyd
       cython blas.pxd
       cython_blas.pyx
        cython lapack.cp311-win amd64.dll.a
       cython_lapack.cp311-win_amd64.pyd
        cython lapack.pxd
        cython_lapack.pyx
        decomp.py
        decomp_cholesky.py
        decomp lu.py
        decomp_qr.py
        decomp_schur.py
       decomp_svd.py
        interpolative.py
        lapack.py
       matfuncs.py
       misc.py
        special_matrices.py
-
        basic.py
        _blas_subroutines.h
        cythonized array utils.cp311-win amd64.dll.a
```

```
_cythonized_array_utils.cp311-win_amd64.pyd
        _cythonized_array_utils.pxd
        _cythonized_array_utils.pyi
        decomp.py
        _decomp_cholesky.py
        decomp cossin.py
        _decomp_interpolative.cp311-win_amd64.dll.a
        decomp interpolative.cp311-win amd64.pyd
        _decomp_ldl.py
        _decomp_lu.py
        decomp lu cython.cp311-win amd64.dll.a
        _decomp_lu_cython.cp311-win_amd64.pyd
        decomp lu cython.pyi
        _decomp_polar.py
        decomp qr.py
        _decomp_qz.py
        _decomp_schur.py
        _decomp_svd.py
        _decomp_update.cp311-win_amd64.dll.a
        _decomp_update.cp311-win_amd64.pyd
        expm frechet.py
        _fblas.cp311-win_amd64.dll.a
        fblas.cp311-win amd64.pyd
        _flapack.cp311-win_amd64.dll.a
        flapack.cp311-win amd64.pyd
        lapack subroutines.h
        _linalg_pythran.cp311-win_amd64.dll.a
        linalg pythran.cp311-win amd64.pyd
        _matfuncs.py
        matfuncs expm.cp311-win amd64.dll.a
        _matfuncs_expm.cp311-win_amd64.pyd
        _matfuncs_expm.pyi
        _matfuncs_inv_ssq.py
        matfuncs sqrtm.py
        _matfuncs_sqrtm_triu.cp311-win_amd64.dll.a
        _matfuncs_sqrtm_triu.cp311-win_amd64.pyd
        _misc.py
        procrustes.py
        _sketches.py
        solvers.py
        _solve_toeplitz.cp311-win_amd64.dll.a
        _solve_toeplitz.cp311-win_amd64.pyd
        _special_matrices.py
        _testutils.py
        __init__.pxd
        __init__.py
   +---tests
  | | test_basic.py
- 1
   | | test_blas.py
   | | test cythonized array utils.py
```

```
test_cython_blas.py
        test_cython_lapack.py
        test_decomp.py
        test_decomp_cholesky.py
        test_decomp_cossin.py
        test decomp ldl.py
        test_decomp_lu.py
        test decomp polar.py
        test_decomp_update.py
        test_extending.py
        test fblas.py
1
        test_interpolative.py
        test lapack.py
        test_matfuncs.py
        test matmul toeplitz.py
        test_procrustes.py
        test sketches.py
        test_solvers.py
        test solve toeplitz.py
        test_special_matrices.py
        init .py
    +---data
            carex_15_data.npz
            carex 18 data.npz
            carex_19_data.npz
            carex_20_data.npz
            carex 6 data.npz
            gendare_20170120_data.npz
    +---_cython_examples
            extending.pyx
            meson.build
    \---_pycache__
            test basic.cpython-311.pyc
            test_blas.cpython-311.pyc
            test cythonized array utils.cpython-311.pyc
            test_cython_blas.cpython-311.pyc
            test cython lapack.cpython-311.pyc
            test_decomp.cpython-311.pyc
            test_decomp_cholesky.cpython-311.pyc
            test_decomp_cossin.cpython-311.pyc
            test_decomp_ldl.cpython-311.pyc
            test decomp lu.cpython-311.pyc
            test_decomp_polar.cpython-311.pyc
            test_decomp_update.cpython-311.pyc
            test_extending.cpython-311.pyc
            test fblas.cpython-311.pyc
            test_interpolative.cpython-311.pyc
            test lapack.cpython-311.pyc
```

```
test_matfuncs.cpython-311.pyc
                test matmul toeplitz.cpython-311.pyc
                test_procrustes.cpython-311.pyc
                test sketches.cpython-311.pyc
                test_solvers.cpython-311.pyc
                test solve toeplitz.cpython-311.pyc
                test_special_matrices.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache_
           basic.cpython-311.pyc
            blas.cpython-311.pyc
            decomp.cpython-311.pyc
            decomp_cholesky.cpython-311.pyc
            decomp lu.cpython-311.pyc
            decomp_qr.cpython-311.pyc
            decomp schur.cpython-311.pyc
            decomp_svd.cpython-311.pyc
            interpolative.cpython-311.pyc
            lapack.cpython-311.pyc
            matfuncs.cpython-311.pyc
            misc.cpython-311.pyc
            special matrices.cpython-311.pyc
            _basic.cpython-311.pyc
            decomp.cpython-311.pyc
            _decomp_cholesky.cpython-311.pyc
            _decomp_cossin.cpython-311.pyc
            decomp ldl.cpython-311.pyc
            _decomp_lu.cpython-311.pyc
            decomp polar.cpython-311.pyc
            _decomp_qr.cpython-311.pyc
            _decomp_qz.cpython-311.pyc
            _decomp_schur.cpython-311.pyc
            _decomp_svd.cpython-311.pyc
            _expm_frechet.cpython-311.pyc
            matfuncs.cpython-311.pyc
            _matfuncs_inv_ssq.cpython-311.pyc
            matfuncs sqrtm.cpython-311.pyc
            _misc.cpython-311.pyc
            procrustes.cpython-311.pyc
            _sketches.cpython-311.pyc
            _solvers.cpython-311.pyc
            _special_matrices.cpython-311.pyc
            _testutils.cpython-311.pyc
            init .cpython-311.pyc
+---misc
   -1
       common.py
        doccer.py
        __init__.py
```

```
\---_pycache_
           common.cpython-311.pyc
           doccer.cpython-311.pyc
           __init__.cpython-311.pyc
+---ndimage
       filters.py
       fourier.py
       interpolation.py
       measurements.py
       morphology.py
       _ctest.cp311-win_amd64.dll.a
       ctest.cp311-win amd64.pyd
       _cytest.cp311-win_amd64.dll.a
       cytest.cp311-win amd64.pyd
       _delegators.py
       filters.py
       _fourier.py
       interpolation.py
       _measurements.py
       morphology.py
       _ndimage_api.py
       nd image.cp311-win amd64.dll.a
       _nd_image.cp311-win_amd64.pyd
       ni docstrings.py
       _ni_label.cp311-win_amd64.dll.a
       _ni_label.cp311-win_amd64.pyd
       ni support.py
       _rank_filter_1d.cp311-win_amd64.dll.a
       rank filter 1d.cp311-win amd64.pyd
       _support_alternative_backends.py
       __init__.py
   +---tests
   1 1
           dots.png
           test_c_api.py
           test_datatypes.py
           test filters.py
           test_fourier.py
           test interpolation.py
           test_measurements.py
           test_morphology.py
           test_ni_support.py
           test_splines.py
           __init__.py
   +---data
               label_inputs.txt
               label results.txt
               label_strels.txt
```

```
\---_pycache_
               test c api.cpython-311.pyc
               test_datatypes.cpython-311.pyc
               test filters.cpython-311.pyc
               test_fourier.cpython-311.pyc
               test interpolation.cpython-311.pyc
               test_measurements.cpython-311.pyc
               test morphology.cpython-311.pyc
               test_ni_support.cpython-311.pyc
               test_splines.cpython-311.pyc
                init .cpython-311.pyc
    \--- pycache
           filters.cpython-311.pyc
           fourier.cpython-311.pyc
           interpolation.cpython-311.pyc
           measurements.cpython-311.pyc
           morphology.cpython-311.pyc
           delegators.cpython-311.pyc
           _filters.cpython-311.pyc
           fourier.cpython-311.pyc
           _interpolation.cpython-311.pyc
           measurements.cpython-311.pyc
           _morphology.cpython-311.pyc
           ndimage api.cpython-311.pyc
           _ni_docstrings.cpython-311.pyc
           _ni_support.cpython-311.pyc
           support alternative backends.cpython-311.pyc
           __init__.cpython-311.pyc
+---odr
       models.py
       odrpack.py
       add newdocs.py
       _models.py
       odrpack.py
       __init__.py
       odrpack.cp311-win amd64.dll.a
       __odrpack.cp311-win_amd64.pyd
   +---tests
      | test_odr.py
       | __init__.py
       \--- pycache
               test_odr.cpython-311.pyc
               __init__.cpython-311.pyc
   \---__pycache__
           models.cpython-311.pyc
           odrpack.cpython-311.pyc
```

```
_add_newdocs.cpython-311.pyc
           _models.cpython-311.pyc
           _odrpack.cpython-311.pyc
           __init__.cpython-311.pyc
+---optimize
       cobyla.py
       cython_optimize.pxd
       elementwise.py
       lbfgsb.py
       linesearch.py
       minpack.py
       minpack2.py
       moduleTNC.py
       nonlin.py
       optimize.py
       slsqp.py
       tnc.py
       zeros.py
       _basinhopping.py
       _bglu_dense.cp311-win_amd64.dll.a
       _bglu_dense.cp311-win_amd64.pyd
       bracket.py
       _chandrupatla.py
       cobyla.cp311-win amd64.dll.a
       _cobyla.cp311-win_amd64.pyd
       _cobyla_py.py
       _cobyqa_py.py
       _constraints.py
       cython nnls.cp311-win amd64.dll.a
       _cython_nnls.cp311-win_amd64.pyd
       dcsrch.py
       _differentiable_functions.py
       _differentialevolution.py
       _direct.cp311-win_amd64.dll.a
       _direct.cp311-win_amd64.pyd
       _direct_py.py
       _dual_annealing.py
       _elementwise.py
       group columns.cp311-win amd64.dll.a
       _group_columns.cp311-win_amd64.pyd
       _hessian_update_strategy.py
       _isotonic.py
       _lbfgsb.cp311-win_amd64.dll.a
       lbfgsb.cp311-win amd64.pyd
       _lbfgsb_py.py
       _linesearch.py
       _linprog.py
       _linprog_doc.py
       _linprog_highs.py
       _linprog_ip.py
```

```
_linprog_rs.py
           _linprog_simplex.py
           _linprog_util.py
           lsap.cp311-win amd64.dll.a
           _lsap.cp311-win_amd64.pyd
           milp.py
           _minimize.py
           _minpack.cp311-win_amd64.dll.a
           _minpack.cp311-win_amd64.pyd
           _minpack_py.py
           moduleTNC.cp311-win amd64.dll.a
           _moduleTNC.cp311-win_amd64.pyd
           _nnls.py
           _nonlin.py
           numdiff.py
           _optimize.py
           _pava_pybind.cp311-win_amd64.dll.a
           _pava_pybind.cp311-win_amd64.pyd
           _qap.py
           _remove_redundancy.py
           root.py
           _root_scalar.py
           shgo.py
           _slsqp.cp311-win_amd64.dll.a
           slsqp.cp311-win amd64.pyd
           _slsqp_py.py
           _spectral.py
           tnc.py
           _trustregion.py
           _trustregion_dogleg.py
           _trustregion_exact.py
           _trustregion_krylov.py
           _trustregion_ncg.py
           tstutils.py
           _zeros.cp311-win_amd64.dll.a
           zeros.cp311-win amd64.pyd
           _zeros_py.py
           __init__.pxd
           __init__.py
       +---cython_optimize
          | c_zeros.pxd
              _zeros.cp311-win_amd64.dll.a
             _zeros.cp311-win_amd64.pyd
               _zeros.pxd
              __init__.py
          - 1
           \---__pycache__
       __init__.cpython-311.pyc
+---tests
```

```
test_bracket.py
                           test chandrupatla.py
                           test_cobyla.py
                           test cobyqa.py
                           test_constraints.py
                           test constraint conversion.py
                           test_cython_optimize.py
                           test differentiable functions.py
                           test_direct.py
                           test_extending.py
                           test_hessian_update_strategy.py
                           test_isotonic_regression.py
                           test lbfgsb hessinv.py
                           test_lbfgsb_setulb.py
                           test least squares.py
                           test_linear_assignment.py
                           test linesearch.py
                           test_linprog.py
                           test_lsq_common.py
                           test_lsq_linear.py
                           test milp.py
                           test_minimize_constrained.py
                           test minpack.py
                           test_nnls.py
                           test nonlin.py
                           test_optimize.py
                           test_quadratic_assignment.py
                           test regression.py
                           test_slsqp.py
                           test tnc.py
                   1
                           test_trustregion.py
                           test_trustregion_exact.py
                           test_trustregion_krylov.py
                           test zeros.py
                           test_basinhopping.py
                           test differential evolution.py
                           test__dual_annealing.py
                           test linprog clean inputs.py
                           test__numdiff.py
                           test remove redundancy.py
                           test__root.py
                           test__shgo.py
                           test_spectral.py
                           __init__.py
                       +---_cython_examples
ı
                               extending.pyx
                               meson.build
           \---__pycache__
                               test bracket.cpython-311.pyc
```

```
test_chandrupatla.cpython-311.pyc
             test cobyla.cpython-311.pyc
             test_cobyqa.cpython-311.pyc
             test constraints.cpython-311.pyc
             test_constraint_conversion.cpython-311.pyc
             test cython optimize.cpython-311.pyc
             test_differentiable_functions.cpython-311.pyc
             test_direct.cpython-311.pyc
             test extending.cpython-311.pyc
             test_hessian_update_strategy.cpython-311.pyc
             test isotonic regression.cpython-311.pyc
             test_lbfgsb_hessinv.cpython-311.pyc
             test lbfgsb setulb.cpython-311.pyc
             test_least_squares.cpython-311.pyc
             test_linear_assignment.cpython-311.pyc
             test_linesearch.cpython-311.pyc
             test linprog.cpython-311.pyc
             test_lsq_common.cpython-311.pyc
             test lsq linear.cpython-311.pyc
             test_milp.cpython-311.pyc
             test minimize constrained.cpython-311.pyc
             test_minpack.cpython-311.pyc
             test nnls.cpython-311.pyc
             test_nonlin.cpython-311.pyc
             test_optimize.cpython-311.pyc
             test_quadratic_assignment.cpython-311.pyc
             test_regression.cpython-311.pyc
             test slsqp.cpython-311.pyc
             test_tnc.cpython-311.pyc
             test trustregion.cpython-311.pyc
             test_trustregion_exact.cpython-311.pyc
             test trustregion krylov.cpython-311.pyc
             test_zeros.cpython-311.pyc
             test basinhopping.cpython-311.pyc
             test__differential_evolution.cpython-311.pyc
             test dual annealing.cpython-311.pyc
             test__linprog_clean_inputs.cpython-311.pyc
             test numdiff.cpython-311.pyc
             test__remove_redundancy.cpython-311.pyc
             test root.cpython-311.pyc
             test_shgo.cpython-311.pyc
             test__spectral.cpython-311.pyc
             __init__.cpython-311.pyc
 +--- highspy
        _core.cp311-win_amd64.dll.a
         _core.cp311-win_amd64.pyd
         _highs_options.cp311-win_amd64.dll.a
         highs options.cp311-win amd64.pyd
        _highs_wrapper.py
        init .py
```

```
_highs_wrapper.cpython-311.pyc
                 __init__.cpython-311.pyc
      +--- lsq
     | | bvls.py
      | | common.py
         | dogbox.py
             givens_elimination.cp311-win_amd64.dll.a
         | givens elimination.cp311-win amd64.pyd
            least_squares.py
            lsq linear.py
            trf.py
            trf linear.py
             __init__.py
         \---__pycache__
                 bvls.cpython-311.pyc
                 common.cpython-311.pyc
                 dogbox.cpython-311.pyc
                 least_squares.cpython-311.pyc
                 lsq linear.cpython-311.pyc
                 trf.cpython-311.pyc
                 trf linear.cpython-311.pyc
                 __init__.cpython-311.pyc
     +--- shgo lib
     | complex.py
      | | _vertex.py
             __init__.py
         \---__pycache__
                 _complex.cpython-311.pyc
                 _vertex.cpython-311.pyc
                 __init__.cpython-311.pyc
     +--- trlib
     | _trlib.cp311-win_amd64.dll.a
      | trlib.cp311-win amd64.pyd
      | \---__pycache__
                 __init__.cpython-311.pyc
     +---_trustregion_constr
     | | canonical_constraint.py
      | equality_constrained_sqp.py
     | minimize_trustregion_constr.py
     | | projections.py
| | | qp subproblem.py
```

```
report.py
       tr interior point.py
       __init__.py
  - 1
   +---tests
           test canonical constraint.py
   test_nested_minimize.py
           test projections.py
           test_qp_subproblem.py
           test_report.py
           __init__.py
       \---_pycache__
               test_canonical_constraint.cpython-311.pyc
               test nested minimize.cpython-311.pyc
               test_projections.cpython-311.pyc
               test_qp_subproblem.cpython-311.pyc
               test_report.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
           canonical_constraint.cpython-311.pyc
            equality constrained sqp.cpython-311.pyc
           minimize_trustregion_constr.cpython-311.pyc
           projections.cpython-311.pyc
           qp_subproblem.cpython-311.pyc
            report.cpython-311.pyc
           tr interior point.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
       cobyla.cpython-311.pyc
       elementwise.cpython-311.pyc
       lbfgsb.cpython-311.pyc
       linesearch.cpython-311.pyc
       minpack.cpython-311.pyc
       minpack2.cpython-311.pyc
       moduleTNC.cpython-311.pyc
       nonlin.cpython-311.pyc
       optimize.cpython-311.pyc
       slsqp.cpython-311.pyc
       tnc.cpython-311.pyc
       zeros.cpython-311.pyc
       _basinhopping.cpython-311.pyc
       bracket.cpython-311.pyc
       _chandrupatla.cpython-311.pyc
       _cobyla_py.cpython-311.pyc
       _cobyqa_py.cpython-311.pyc
       constraints.cpython-311.pyc
       _dcsrch.cpython-311.pyc
       differentiable functions.cpython-311.pyc
```

```
\_{\tt differential evolution.cpython-311.pyc}
            _direct_py.cpython-311.pyc
            _dual_annealing.cpython-311.pyc
            _elementwise.cpython-311.pyc
            _hessian_update_strategy.cpython-311.pyc
            isotonic.cpython-311.pyc
            _lbfgsb_py.cpython-311.pyc
            linesearch.cpython-311.pyc
            _linprog.cpython-311.pyc
            _linprog_doc.cpython-311.pyc
            _linprog_highs.cpython-311.pyc
            _linprog_ip.cpython-311.pyc
            _linprog_rs.cpython-311.pyc
            _linprog_simplex.cpython-311.pyc
            linprog util.cpython-311.pyc
            _milp.cpython-311.pyc
            _minimize.cpython-311.pyc
            _minpack_py.cpython-311.pyc
            nnls.cpython-311.pyc
            _nonlin.cpython-311.pyc
            numdiff.cpython-311.pyc
            _optimize.cpython-311.pyc
            qap.cpython-311.pyc
            _remove_redundancy.cpython-311.pyc
            root.cpython-311.pyc
            _root_scalar.cpython-311.pyc
            _shgo.cpython-311.pyc
            _slsqp_py.cpython-311.pyc
            _spectral.cpython-311.pyc
            tnc.cpython-311.pyc
            _trustregion.cpython-311.pyc
            _trustregion_dogleg.cpython-311.pyc
            _trustregion_exact.cpython-311.pyc
            _trustregion_krylov.cpython-311.pyc
            _trustregion_ncg.cpython-311.pyc
            _tstutils.cpython-311.pyc
            _zeros_py.cpython-311.pyc
            __init__.cpython-311.pyc
+---signal
       bsplines.py
        filter_design.py
        fir_filter_design.py
        ltisys.py
        lti conversion.py
        signaltools.py
        spectral.py
        spline.py
        waveforms.py
        wavelets.py
        arraytools.py
```

```
_czt.py
    _filter_design.py
    _fir_filter_design.py
    _ltisys.py
    _lti_conversion.py
    max len seq.py
    _max_len_seq_inner.cp311-win_amd64.dll.a
    max len seq inner.cp311-win amd64.pyd
    peak finding.py
    _peak_finding_utils.cp311-win_amd64.dll.a
    _peak_finding_utils.cp311-win_amd64.pyd
    _savitzky_golay.py
    short time fft.py
    _signaltools.py
    sigtools.cp311-win amd64.dll.a
    _sigtools.cp311-win_amd64.pyd
    _sosfilt.cp311-win_amd64.dll.a
    _sosfilt.cp311-win_amd64.pyd
    _spectral_py.py
    _spline.cp311-win_amd64.dll.a
    spline.cp311-win amd64.pyd
    _spline.pyi
    spline filters.py
    upfirdn.py
    upfirdn apply.cp311-win amd64.dll.a
    _upfirdn_apply.cp311-win_amd64.pyd
    _waveforms.py
    wavelets.py
    __init__.py
1
+---tests
        mpsig.py
        test_array_tools.py
        test bsplines.py
        test_cont2discrete.py
        test czt.py
        test_dltisys.py
        test filter design.py
        test_fir_filter_design.py
        test ltisys.py
        test_max_len_seq.py
        test_peak_finding.py
        test_result_type.py
        test_savitzky_golay.py
        test short time fft.py
        test_signaltools.py
        test_spectral.py
        test_splines.py
test upfirdn.py
        test_waveforms.py
        test wavelets.py
```

```
test_windows.py
       _scipy_spectral_test_shim.py
       __init__.py
   \---_pycache_
            mpsig.cpython-311.pyc
            test_array_tools.cpython-311.pyc
            test bsplines.cpython-311.pyc
            test_cont2discrete.cpython-311.pyc
            test_czt.cpython-311.pyc
            test dltisys.cpython-311.pyc
            test_filter_design.cpython-311.pyc
            test fir filter design.cpython-311.pyc
            test_ltisys.cpython-311.pyc
            test max len seq.cpython-311.pyc
            test_peak_finding.cpython-311.pyc
            test_result_type.cpython-311.pyc
            test_savitzky_golay.cpython-311.pyc
            test short time fft.cpython-311.pyc
            test_signaltools.cpython-311.pyc
            test spectral.cpython-311.pyc
            test_splines.cpython-311.pyc
            test upfirdn.cpython-311.pyc
            test_waveforms.cpython-311.pyc
            test wavelets.cpython-311.pyc
            test windows.cpython-311.pyc
            _scipy_spectral_test_shim.cpython-311.pyc
            init .cpython-311.pyc
+---windows
      windows.py
       windows.py
       __init__.py
    \---__pycache__
           windows.cpython-311.pyc
            _windows.cpython-311.pyc
            init .cpython-311.pyc
\--- pycache
       bsplines.cpython-311.pyc
        filter_design.cpython-311.pyc
        fir_filter_design.cpython-311.pyc
        ltisys.cpython-311.pyc
        lti conversion.cpython-311.pyc
        signaltools.cpython-311.pyc
        spectral.cpython-311.pyc
        spline.cpython-311.pyc
        waveforms.cpython-311.pyc
        wavelets.cpython-311.pyc
        arraytools.cpython-311.pyc
```

```
_czt.cpython-311.pyc
           _filter_design.cpython-311.pyc
            _fir_filter_design.cpython-311.pyc
            _ltisys.cpython-311.pyc
           _lti_conversion.cpython-311.pyc
            _max_len_seq.cpython-311.pyc
            _peak_finding.cpython-311.pyc
            _savitzky_golay.cpython-311.pyc
            _short_time_fft.cpython-311.pyc
            _signaltools.cpython-311.pyc
            _spectral_py.cpython-311.pyc
            _spline_filters.cpython-311.pyc
            upfirdn.cpython-311.pyc
            _waveforms.cpython-311.pyc
            wavelets.cpython-311.pyc
            __init__.cpython-311.pyc
+---sparse
       base.py
       bsr.py
        compressed.py
        construct.py
        coo.py
        csc.py
        csr.py
        data.py
        dia.py
        dok.py
        extract.py
        lil.py
        sparsetools.py
        spfuncs.py
        sputils.py
        base.py
        _bsr.py
        _compressed.py
        _construct.py
        coo.py
        _csc.py
        csparsetools.cp311-win amd64.dll.a
        _csparsetools.cp311-win_amd64.pyd
        _csr.py
        _data.py
        _dia.py
        dok.py
        _extract.py
        index.py
        _lil.py
        matrix.py
       _matrix_io.py
        sparsetools.cp311-win amd64.dll.a
```

```
_sparsetools.cp311-win_amd64.pyd
           spfuncs.py
           _sputils.py
           __init__.py
       +---csgraph
               _flow.cp311-win_amd64.dll.a
              flow.cp311-win amd64.pyd
              _laplacian.py
               _matching.cp311-win_amd64.dll.a
               matching.cp311-win amd64.pyd
              _min_spanning_tree.cp311-win_amd64.dll.a
               min spanning tree.cp311-win amd64.pyd
               _reordering.cp311-win_amd64.dll.a
               reordering.cp311-win amd64.pyd
              _shortest_path.cp311-win_amd64.dll.a
               _shortest_path.cp311-win_amd64.pyd
               _tools.cp311-win_amd64.dll.a
              tools.cp311-win amd64.pyd
              _traversal.cp311-win_amd64.dll.a
               traversal.cp311-win amd64.pyd
               _validation.py
               init .py
          +---tests
                  test_connected_components.py
          test_conversions.py
                  test flow.py
                   test_graph_laplacian.py
               1
                  test matching.py
                   test_pydata_sparse.py
                   test reordering.py
                   test_shortest_path.py
                   test_spanning_tree.py
                   test_traversal.py
                  init .py
               \--- pycache
                      test_connected_components.cpython-311.pyc
                       test conversions.cpython-311.pyc
                      test_flow.cpython-311.pyc
                       test_graph_laplacian.cpython-311.pyc
                       test_matching.cpython-311.pyc
                       test_pydata_sparse.cpython-311.pyc
                       test_reordering.cpython-311.pyc
                       test_shortest_path.cpython-311.pyc
                      test_spanning_tree.cpython-311.pyc
                       test_traversal.cpython-311.pyc
                       init .cpython-311.pyc
```

```
_laplacian.cpython-311.pyc
            validation.cpython-311.pyc
            __init__.cpython-311.pyc
+---linalg
        dsolve.py
        eigen.py
        interface.py
        isolve.py
        matfuncs.py
        _expm_multiply.py
        _interface.py
        matfuncs.py
        _norm.py
        onenormest.py
        _special_sparse_arrays.py
        _svdp.py
        __init__.py
   +---tests
    1 1
            propack test data.npz
    1 1
            test_expm_multiply.py
            test interface.py
            test_matfuncs.py
            test norm.py
            test onenormest.py
        test_propack.py
            test_pydata_sparse.py
            test_special_sparse_arrays.py
            __init__.py
     1
       \--- pycache
                test_expm_multiply.cpython-311.pyc
                test_interface.cpython-311.pyc
                test_matfuncs.cpython-311.pyc
                test norm.cpython-311.pyc
                test_onenormest.cpython-311.pyc
                test propack.cpython-311.pyc
                test_pydata_sparse.cpython-311.pyc
                test special sparse arrays.cpython-311.pyc
                __init__.cpython-311.pyc
| +---_dsolve
    | | linsolve.py
            add newdocs.py
            _superlu.cp311-win_amd64.dll.a
           _superlu.cp311-win_amd64.pyd
            __init__.py
    | | +---tests
| | | test linsolve.py
```

```
test_linsolve.cpython-311.pyc
__init__.cpython-311.pyc
     linsolve.cpython-311.pyc
               _add_newdocs.cpython-311.pyc
               __init__.cpython-311.pyc
       1 1
       | +---_eigen
     | | _svds_doc.py
         1 1 1
I
        | | +---arpack
        | | | arpack.py
        | | | COPYING
| | _arpack.cp311-win_amd64.dll.a
| | arpack.cp311-win amd64.pyd
        1
        | | +---tests
         | | | test arpack.py
         1
                  test_arpack.cpython-311.pyc
                   __init__.cpython-311.pyc
        arpack.cpython-311.pyc
                 __init__.cpython-311.pyc
1
       | | +---lobpcg
| | lobpcg.py
        1
        | | +---tests
        | | | | test_lobpcg.py
test lobpcg.cpython-311.pyc
       __init__.cpython-311.pyc
1
        lobpcg.cpython-311.pyc
                 __init__.cpython-311.pyc
```

```
+---tests
                      test_svds.py
                         __init__.py
                              \---__pycache__
                                      test svds.cpython-311.pyc
                                      __init__.cpython-311.pyc
                           \---_pycache_
                                  _svds.cpython-311.pyc
                                  _svds_doc.cpython-311.pyc
                                  __init__.cpython-311.pyc
                       +---_isolve
                         - 1
                              iterative.py
                              lgmres.py
                              lsmr.py
                              lsqr.py
                              minres.py
                              tfqmr.py
                              utils.py
                              _gcrotmk.py
                               init .py
                          +---tests
                                  test_gcrotmk.py
                                  test_iterative.py
                                  test lgmres.py
                                  test_lsmr.py
                                  test lsqr.py
                                  test_minres.py
                                  test_utils.py
                                  __init__.py
                              \---_pycache_
                                      test_gcrotmk.cpython-311.pyc
                                      test_iterative.cpython-311.pyc
                                      test lgmres.cpython-311.pyc
                                      test_lsmr.cpython-311.pyc
                                      test lsqr.cpython-311.pyc
                                      test_minres.cpython-311.pyc
                                      test_utils.cpython-311.pyc
                                      __init__.cpython-311.pyc
                          \--- pycache
                                  iterative.cpython-311.pyc
Ī
                                  lgmres.cpython-311.pyc
                                  lsmr.cpython-311.pyc
                                  lsqr.cpython-311.pyc
                                  minres.cpython-311.pyc
                                  tfqmr.cpython-311.pyc
```

```
utils.cpython-311.pyc
                 _gcrotmk.cpython-311.pyc
                 __init__.cpython-311.pyc
     +---_propack
             cpropack.cp311-win amd64.dll.a
             _cpropack.cp311-win_amd64.pyd
             dpropack.cp311-win amd64.dll.a
             _dpropack.cp311-win_amd64.pyd
            _spropack.cp311-win_amd64.dll.a
             spropack.cp311-win amd64.pyd
             _zpropack.cp311-win_amd64.dll.a
             zpropack.cp311-win amd64.pyd
    \--- pycache
             dsolve.cpython-311.pyc
             eigen.cpython-311.pyc
             interface.cpython-311.pyc
             isolve.cpython-311.pyc
             matfuncs.cpython-311.pyc
             expm multiply.cpython-311.pyc
             _interface.cpython-311.pyc
             matfuncs.cpython-311.pyc
             _norm.cpython-311.pyc
             onenormest.cpython-311.pyc
             _special_sparse_arrays.cpython-311.pyc
             _svdp.cpython-311.pyc
             __init__.cpython-311.pyc
 +---tests
         test_arithmetic1d.py
         test_array_api.py
         test_base.py
         test common1d.py
         test_construct.py
         test coo.py
         test_csc.py
         test csr.py
         test_dok.py
         test extract.py
         test_indexing1d.py
         test_matrix_io.py
         test_minmax1d.py
         test_sparsetools.py
         test spfuncs.py
         test_sputils.py
         __init__.py
   +---data
csc_py2.npz
   csc_py3.npz
```

```
\--- pycache
           test_arithmetic1d.cpython-311.pyc
           test_array_api.cpython-311.pyc
           test_base.cpython-311.pyc
           test common1d.cpython-311.pyc
           test_construct.cpython-311.pyc
           test coo.cpython-311.pyc
           test_csc.cpython-311.pyc
           test_csr.cpython-311.pyc
           test_dok.cpython-311.pyc
           test_extract.cpython-311.pyc
           test indexing1d.cpython-311.pyc
           test_matrix_io.cpython-311.pyc
           test minmaxld.cpython-311.pyc
           test_sparsetools.cpython-311.pyc
           test_spfuncs.cpython-311.pyc
           test_sputils.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
       base.cpython-311.pyc
       bsr.cpython-311.pyc
       compressed.cpython-311.pyc
       construct.cpython-311.pyc
       coo.cpython-311.pyc
       csc.cpython-311.pyc
       csr.cpython-311.pyc
       data.cpython-311.pyc
       dia.cpython-311.pyc
       dok.cpython-311.pyc
       extract.cpython-311.pyc
       lil.cpython-311.pyc
       sparsetools.cpython-311.pyc
       spfuncs.cpython-311.pyc
       sputils.cpython-311.pyc
        _base.cpython-311.pyc
       bsr.cpython-311.pyc
        _compressed.cpython-311.pyc
       construct.cpython-311.pyc
       _coo.cpython-311.pyc
       _csc.cpython-311.pyc
       _csr.cpython-311.pyc
       _data.cpython-311.pyc
       dia.cpython-311.pyc
       _dok.cpython-311.pyc
       _extract.cpython-311.pyc
       _index.cpython-311.pyc
       _lil.cpython-311.pyc
       _matrix.cpython-311.pyc
       matrix io.cpython-311.pyc
```

```
_spfuncs.cpython-311.pyc
           sputils.cpython-311.pyc
            __init__.cpython-311.pyc
+---spatial
       ckdtree.py
       distance.py
       distance.pyi
       kdtree.py
       qhull.py
       ckdtree.cp311-win amd64.dll.a
       _ckdtree.cp311-win_amd64.pyd
       distance pybind.cp311-win amd64.dll.a
       _distance_pybind.cp311-win_amd64.pyd
       distance wrap.cp311-win amd64.dll.a
       _distance_wrap.cp311-win_amd64.pyd
       _geometric_slerp.py
       _hausdorff.cp311-win_amd64.dll.a
       _hausdorff.cp311-win_amd64.pyd
       _kdtree.py
       plotutils.py
       _procrustes.py
       qhull.cp311-win amd64.dll.a
       _qhull.cp311-win_amd64.pyd
       qhull.pyi
       _spherical_voronoi.py
       _voronoi.cp311-win_amd64.dll.a
       voronoi.cp311-win amd64.pyd
       _voronoi.pyi
       __init__.py
   +---qhull_src
           COPYING.txt
   +---tests
           test distance.py
           test_hausdorff.py
           test kdtree.py
           test_qhull.py
           test slerp.py
           test_spherical_voronoi.py
           test__plotutils.py
           test__procrustes.py
           __init__.py
      +---data
               cdist-X1.txt
               cdist-X2.txt
               degenerate_pointset.npz
               iris.txt
               pdist-boolean-inp.txt
```

```
pdist-chebyshev-ml-iris.txt
            pdist-chebyshev-ml.txt
            pdist-cityblock-ml-iris.txt
            pdist-cityblock-ml.txt
            pdist-correlation-ml-iris.txt
            pdist-correlation-ml.txt
            pdist-cosine-ml-iris.txt
            pdist-cosine-ml.txt
            pdist-double-inp.txt
            pdist-euclidean-ml-iris.txt
            pdist-euclidean-ml.txt
            pdist-hamming-ml.txt
            pdist-jaccard-ml.txt
            pdist-jensenshannon-ml-iris.txt
            pdist-jensenshannon-ml.txt
            pdist-minkowski-3.2-ml-iris.txt
            pdist-minkowski-3.2-ml.txt
            pdist-minkowski-5.8-ml-iris.txt
            pdist-seuclidean-ml-iris.txt
            pdist-seuclidean-ml.txt
            pdist-spearman-ml.txt
            random-bool-data.txt
            random-double-data.txt
            random-int-data.txt
            random-uint-data.txt
            selfdual-4d-polytope.txt
    \---_pycache_
            test_distance.cpython-311.pyc
            test hausdorff.cpython-311.pyc
            test_kdtree.cpython-311.pyc
            test_qhull.cpython-311.pyc
            test_slerp.cpython-311.pyc
            test_spherical_voronoi.cpython-311.pyc
            test__plotutils.cpython-311.pyc
            test procrustes.cpython-311.pyc
            __init__.cpython-311.pyc
+---transform
       rotation.py
       _rotation.cp311-win_amd64.dll.a
       _rotation.cp311-win_amd64.pyd
       _rotation_groups.py
       _rotation_spline.py
       __init__.py
  +---tests
  1 1
           test_rotation.py
  | | test_rotation_groups.py
          test_rotation_spline.py
           init .py
```

```
\--- pycache
                    test_rotation.cpython-311.pyc
                    test rotation groups.cpython-311.pyc
                    test_rotation_spline.cpython-311.pyc
                    init .cpython-311.pyc
        \---__pycache__
               rotation.cpython-311.pyc
               _rotation_groups.cpython-311.pyc
                rotation spline.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            ckdtree.cpython-311.pyc
            distance.cpython-311.pyc
            kdtree.cpython-311.pyc
            qhull.cpython-311.pyc
            _geometric_slerp.cpython-311.pyc
            _kdtree.cpython-311.pyc
            plotutils.cpython-311.pyc
            _procrustes.cpython-311.pyc
            _spherical_voronoi.cpython-311.pyc
            __init__.cpython-311.pyc
+---special
        add_newdocs.py
       basic.py
        cython_special.cp311-win_amd64.dll.a
        cython_special.cp311-win_amd64.pyd
        cython_special.pxd
        cython special.pyi
        libsf_error_state.dll
        libsf_error_state.dll.a
        orthogonal.py
        sf error.py
        specfun.py
        spfun stats.py
        _add_newdocs.py
        _comb.cp311-win_amd64.dll.a
        _comb.cp311-win_amd64.pyd
       _ellip_harm.py
       _ellip_harm_2.cp311-win_amd64.dll.a
        ellip harm 2.cp311-win amd64.pyd
       _gufuncs.cp311-win_amd64.dll.a
       _gufuncs.cp311-win_amd64.pyd
        _input_validation.py
lambertw.py
        _logsumexp.py
       mptestutils.py
```

```
_multiufuncs.py
   orthogonal.py
    _orthogonal.pyi
    _sf_error.py
    _specfun.cp311-win_amd64.dll.a
    specfun.cp311-win amd64.pyd
    _special_ufuncs.cp311-win_amd64.dll.a
    special ufuncs.cp311-win amd64.pyd
    _spfun_stats.py
    _spherical_bessel.py
    _support_alternative_backends.py
    _testutils.py
    test internal.cp311-win amd64.dll.a
    _test_internal.cp311-win_amd64.pyd
    test internal.pyi
    _ufuncs.cp311-win_amd64.dll.a
    _ufuncs.cp311-win_amd64.pyd
    _ufuncs.pyi
    ufuncs.pyx
    _ufuncs_cxx.cp311-win_amd64.dll.a
    ufuncs cxx.cp311-win amd64.pyd
    _ufuncs_cxx.pxd
    ufuncs cxx.pyx
    _ufuncs_cxx_defs.h
    ufuncs defs.h
    __init__.pxd
    __init__.py
+---tests
1
       test basic.py
       test_bdtr.py
        test_boost_ufuncs.py
       test_boxcox.py
        test_cdflib.py
        test_cdft_asymptotic.py
        test_cephes_intp_cast.py
       test_cosine_distr.py
        test_cython_special.py
        test_data.py
        test dd.py
        test_digamma.py
        test_ellip_harm.py
        test_erfinv.py
        test_exponential_integrals.py
        test extending.py
test_faddeeva.py
        test_gamma.py
        test_gammainc.py
1
    test_hyp2f1.py
       test_hypergeometric.py
       test_iv_ratio.py
```

```
test_kolmogorov.py
                          test_lambertw.py
                     - 1
                          test_legendre.py
                          test loggamma.py
test_logit.py
                          test logsumexp.py
                          test_log_softmax.py
                          test mpmath.py
                          test_nan_inputs.py
1
                          test_ndtr.py
                          test_ndtri_exp.py
                   1
                       -
                          test_orthogonal.py
                          test orthogonal eval.py
ī
                          test_owens_t.py
                          test pcf.py
                          test_pdtr.py
                          test_powm1.py
ı
                          test_precompute_expn_asy.py
                          test_precompute_gammainc.py
                       test_precompute_utils.py
                           test round.py
                          test_sf_error.py
I
                       test sici.py
                          test_specfun.py
                          test spence.py
                          test_spfun_stats.py
                          test_spherical_bessel.py
ī
                          test_sph_harm.py
                          test_support_alternative_backends.py
                          test trig.py
                   1
                       1
                          test_ufunc_signatures.py
                          test_wrightomega.py
ı
                          test_wright_bessel.py
                          test_xsf_cuda.py
                          test_zeta.py
                          __init__.py
1
                       +---data
                     | | boost.npz
                              local.npz
1
                      - 1
                              __init__.py
                      1
                          -
                          \---_pycache__
                                  __init__.cpython-311.pyc
                   Ī
                      +---_cython_examples
                              extending.pyx
                   meson.build
```

```
test_basic.cpython-311.pyc
test bdtr.cpython-311.pyc
test_boost_ufuncs.cpython-311.pyc
test boxcox.cpython-311.pyc
test_cdflib.cpython-311.pyc
test cdft asymptotic.cpython-311.pyc
test_cephes_intp_cast.cpython-311.pyc
test cosine distr.cpython-311.pyc
test_cython_special.cpython-311.pyc
test_data.cpython-311.pyc
test dd.cpython-311.pyc
test_digamma.cpython-311.pyc
test ellip harm.cpython-311.pyc
test_erfinv.cpython-311.pyc
test exponential integrals.cpython-311.pyc
test_extending.cpython-311.pyc
test faddeeva.cpython-311.pyc
test_gamma.cpython-311.pyc
test gammainc.cpython-311.pyc
test_hyp2f1.cpython-311.pyc
test hypergeometric.cpython-311.pyc
test_iv_ratio.cpython-311.pyc
test kolmogorov.cpython-311.pyc
test_lambertw.cpython-311.pyc
test legendre.cpython-311.pyc
test loggamma.cpython-311.pyc
test_logit.cpython-311.pyc
test logsumexp.cpython-311.pyc
test_log_softmax.cpython-311.pyc
test mpmath.cpython-311.pyc
test_nan_inputs.cpython-311.pyc
test ndtr.cpython-311.pyc
test_ndtri_exp.cpython-311.pyc
test orthogonal.cpython-311.pyc
test_orthogonal_eval.cpython-311.pyc
test owens t.cpython-311.pyc
test_pcf.cpython-311.pyc
test pdtr.cpython-311.pyc
test_powm1.cpython-311.pyc
test precompute expn asy.cpython-311.pyc
test_precompute_gammainc.cpython-311.pyc
test_precompute_utils.cpython-311.pyc
test_round.cpython-311.pyc
test_sf_error.cpython-311.pyc
test sici.cpython-311.pyc
test_specfun.cpython-311.pyc
test_spence.cpython-311.pyc
test_spfun_stats.cpython-311.pyc
test spherical bessel.cpython-311.pyc
test_sph_harm.cpython-311.pyc
test support alternative backends.cpython-311.pyc
```

```
test_trig.cpython-311.pyc
            test_ufunc_signatures.cpython-311.pyc
            test_wrightomega.cpython-311.pyc
            test_wright_bessel.cpython-311.pyc
            test_xsf_cuda.cpython-311.pyc
            test zeta.cpython-311.pyc
            __init__.cpython-311.pyc
+---xsf
        binom.h
        cdflib.h
        config.h
        digamma.h
        error.h
        evalpoly.h
        expint.h
        hyp2f1.h
        iv_ratio.h
        lambertw.h
        loggamma.h
        sici.h
        tools.h
        trig.h
        wright_bessel.h
        zlog1.h
    \---cephes
            airy.h
            besselpoly.h
            beta.h
            cbrt.h
            chbevl.h
            chdtr.h
            const.h
            ellie.h
            ellik.h
            ellpe.h
            ellpk.h
            expn.h
            gamma.h
            hyp2f1.h
            hyperg.h
            i0.h
            i1.h
            igam.h
            igami.h
            igam_asymp_coeff.h
            j0.h
            j1.h
            jv.h
            k0.h
```

```
k1.h
            kn.h
            lanczos.h
            ndtr.h
            poch.h
            polevl.h
            psi.h
            rgamma.h
            scipy_iv.h
            shichi.h
            sici.h
            sindg.h
            tandq.h
            trig.h
            unity.h
            zeta.h
+---_precompute
        cosine_cdf.py
        expn_asy.py
        gammainc asy.py
        gammainc_data.py
        hyp2f1 data.py
        lambertw.py
        loggamma.py
        struve_convergence.py
        utils.py
        wrightomega.py
        wright_bessel.py
        wright bessel data.py
        zetac.py
        __init__.py
    \---_pycache__
            cosine_cdf.cpython-311.pyc
            expn_asy.cpython-311.pyc
            gammainc_asy.cpython-311.pyc
            gammainc data.cpython-311.pyc
            hyp2f1_data.cpython-311.pyc
            lambertw.cpython-311.pyc
            loggamma.cpython-311.pyc
            struve_convergence.cpython-311.pyc
            utils.cpython-311.pyc
            wrightomega.cpython-311.pyc
            wright bessel.cpython-311.pyc
            wright_bessel_data.cpython-311.pyc
            zetac.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        add newdocs.cpython-311.pyc
```

```
basic.cpython-311.pyc
           orthogonal.cpython-311.pyc
            sf_error.cpython-311.pyc
            specfun.cpython-311.pyc
            spfun_stats.cpython-311.pyc
            add newdocs.cpython-311.pyc
            _basic.cpython-311.pyc
            ellip harm.cpython-311.pyc
            _input_validation.cpython-311.pyc
            _lambertw.cpython-311.pyc
            _logsumexp.cpython-311.pyc
            _mptestutils.cpython-311.pyc
            multiufuncs.cpython-311.pyc
            _orthogonal.cpython-311.pyc
            sf error.cpython-311.pyc
            _spfun_stats.cpython-311.pyc
            _spherical_bessel.cpython-311.pyc
            _support_alternative_backends.cpython-311.pyc
            testutils.cpython-311.pyc
            __init__.cpython-311.pyc
+---stats
       biasedurn.py
        contingency.py
        distributions.py
        kde.py
        morestats.py
       mstats.py
        mstats_basic.py
       mstats extras.py
       mvn.py
        qmc.py
        sampling.py
        stats.py
        _ansari_swilk_statistics.cp311-win_amd64.dll.a
        ansari swilk statistics.cp311-win amd64.pyd
        _axis_nan_policy.py
        biasedurn.cp311-win amd64.dll.a
        _biasedurn.cp311-win_amd64.pyd
        biasedurn.pxd
        _binned_statistic.py
        _binomtest.py
        _bws_test.py
        _censored_data.py
        common.py
        _constants.py
        _continuous_distns.py
        _correlation.py
        covariance.py
        _crosstab.py
       discrete distns.py
```

```
_distn_infrastructure.py
                       _distribution_infrastructure.py
                       _distr_params.py
                       _entropy.py
                       _fit.py
                       _hypotests.py
                       _kde.py
                       ksstats.py
                       _mannwhitneyu.py
                       _mgc.py
                       morestats.py
                       _mstats_basic.py
                       mstats extras.py
                       _multicomp.py
                       multivariate.py
                       _mvn.cp311-win_amd64.dll.a
                       _mvn.cp311-win_amd64.pyd
                       _new_distributions.py
                       _odds_ratio.py
                       _page_trend_test.py
                       probability distribution.py
                       _qmc.py
                       qmc cy.cp311-win amd64.dll.a
                       _qmc_cy.cp311-win_amd64.pyd
                       qmc cy.pyi
                       _qmvnt.py
                       _relative_risk.py
                       resampling.py
                       _result_classes.py
                       sampling.py
                       _sensitivity_analysis.py
                       _sobol.cp311-win_amd64.dll.a
                       _sobol.cp311-win_amd64.pyd
                       sobol.pyi
                       _sobol_direction_numbers.npz
                       _stats.cp311-win_amd64.dll.a
                       _stats.cp311-win_amd64.pyd
                       stats.pxd
                       _stats_mstats_common.py
                       stats py.py
                       _stats_pythran.cp311-win_amd64.dll.a
                       _stats_pythran.cp311-win_amd64.pyd
                       _survival.py
                       _tukeylambda_stats.py
                       variation.py
                       _warnings_errors.py
ı
                       wilcoxon.py
                       __init__.py
               -
                  +---tests
           | | | common tests.py
```

```
test_axis_nan_policy.py
                            test binned statistic.py
                            test_censored_data.py
                            test contingency.py
                            test_continuous.py
                            test continuous basic.py
                            test_continuous_fit_censored.py
                            test correlation.py
                            test crosstab.py
                            test_discrete_basic.py
                            test_discrete_distns.py
                            test_distributions.py
                            test entropy.py
                            test_fast_gen_inversion.py
                            test_fit.py
                            test_hypotests.py
                            test kdeoth.py
                            test_mgc.py
                            test morestats.py
                            test_mstats_basic.py
                            test mstats extras.py
                            test_multicomp.py
                            test multivariate.py
                            test_odds_ratio.py
                            test qmc.py
                            test rank.py
                            test_relative_risk.py
                            test resampling.py
                            test_sampling.py
                            test sensitivity analysis.py
                            test_stats.py
                            test_survival.py
                            test_tukeylambda_stats.py
                            test variation.py
                            __init__.py
                       +---data
                               fisher exact results from r.py
                                jf_skew_t_gamlss_pdf_data.npy
                                rel breitwigner pdf sample data ROOT.npy
                                studentized_range_mpmath_ref.json
                                _mvt.py
                        -
                            +---levy_stable
                                    stable-loc-scale-sample-data.npy
                                    stable-Z1-cdf-sample-data.npy
ı
                                    stable-Z1-pdf-sample-data.npy
                          +---nist anova
                                    AtmWtAg.dat
                                    SiRstv.dat
```

```
SmLs01.dat
            SmLs02.dat
            SmLs03.dat
            SmLs04.dat
            SmLs05.dat
            SmLs06.dat
            SmLs07.dat
            SmLs08.dat
            SmLs09.dat
  +---nist linregress
           Norris.dat
   \---__pycache__
            fisher_exact_results_from_r.cpython-311.pyc
            _mvt.cpython-311.pyc
\---__pycache__
        common tests.cpython-311.pyc
        test_axis_nan_policy.cpython-311.pyc
        test binned statistic.cpython-311.pyc
        test_censored_data.cpython-311.pyc
        test contingency.cpython-311.pyc
        test_continuous.cpython-311.pyc
        test continuous basic.cpython-311.pyc
        test_continuous_fit_censored.cpython-311.pyc
        test_correlation.cpython-311.pyc
        test crosstab.cpython-311.pyc
        test_discrete_basic.cpython-311.pyc
        test discrete distns.cpython-311.pyc
        test_distributions.cpython-311.pyc
        test_entropy.cpython-311.pyc
        test_fast_gen_inversion.cpython-311.pyc
        test fit.cpython-311.pyc
        test_hypotests.cpython-311.pyc
        test kdeoth.cpython-311.pyc
        test_mgc.cpython-311.pyc
        test morestats.cpython-311.pyc
        test_mstats_basic.cpython-311.pyc
        test mstats extras.cpython-311.pyc
        test_multicomp.cpython-311.pyc
        test_multivariate.cpython-311.pyc
        test_odds_ratio.cpython-311.pyc
        test_qmc.cpython-311.pyc
        test rank.cpython-311.pyc
        test_relative_risk.cpython-311.pyc
        test_resampling.cpython-311.pyc
        test_sampling.cpython-311.pyc
        test_sensitivity_analysis.cpython-311.pyc
        test_stats.cpython-311.pyc
        test survival.cpython-311.pyc
```

```
test_tukeylambda_stats.cpython-311.pyc
                  test variation.cpython-311.pyc
                  __init__.cpython-311.pyc
| +---_levy_stable
      | levyst.cp311-win amd64.dll.a
             levyst.cp311-win_amd64.pyd
       init .py
      | \---_pycache_
                  __init__.cpython-311.pyc
      +--- rcont
1 1
      | rcont.cp311-win_amd64.dll.a
      | | rcont.cp311-win amd64.pyd
      | \---__pycache__
                  __init__.cpython-311.pyc
      +--- unuran
      | unuran_wrapper.cp311-win_amd64.dll.a
             unuran wrapper.cp311-win amd64.pyd
       unuran_wrapper.pyi
              init .py
       | \---_pycache_
                  init .cpython-311.pyc
      \---_pycache__
              biasedurn.cpython-311.pyc
              contingency.cpython-311.pyc
              distributions.cpython-311.pyc
              kde.cpython-311.pyc
              morestats.cpython-311.pyc
              mstats.cpython-311.pyc
              mstats_basic.cpython-311.pyc
              mstats extras.cpython-311.pyc
              mvn.cpython-311.pyc
              qmc.cpython-311.pyc
              sampling.cpython-311.pyc
              stats.cpython-311.pyc
              _axis_nan_policy.cpython-311.pyc
              _binned_statistic.cpython-311.pyc
              binomtest.cpython-311.pyc
              _bws_test.cpython-311.pyc
              _censored_data.cpython-311.pyc
              _common.cpython-311.pyc
              constants.cpython-311.pyc
_continuous_distns.cpython-311.pyc
              correlation.cpython-311.pyc
```

```
_covariance.cpython-311.pyc
            _crosstab.cpython-311.pyc
            _discrete_distns.cpython-311.pyc
            _distn_infrastructure.cpython-311.pyc
            _distribution_infrastructure.cpython-311.pyc
            distr params.cpython-311.pyc
            _entropy.cpython-311.pyc
            fit.cpython-311.pyc
            _hypotests.cpython-311.pyc
            _kde.cpython-311.pyc
            ksstats.cpython-311.pyc
            _mannwhitneyu.cpython-311.pyc
            mgc.cpython-311.pyc
            _morestats.cpython-311.pyc
            mstats basic.cpython-311.pyc
            _mstats_extras.cpython-311.pyc
            multicomp.cpython-311.pyc
            _multivariate.cpython-311.pyc
            new distributions.cpython-311.pyc
            _odds_ratio.cpython-311.pyc
            page trend test.cpython-311.pyc
            _probability_distribution.cpython-311.pyc
            qmc.cpython-311.pyc
            _qmvnt.cpython-311.pyc
            relative risk.cpython-311.pyc
            _resampling.cpython-311.pyc
            _result_classes.cpython-311.pyc
            sampling.cpython-311.pyc
            _sensitivity_analysis.cpython-311.pyc
            stats mstats common.cpython-311.pyc
            _stats_py.cpython-311.pyc
            _survival.cpython-311.pyc
            _tukeylambda_stats.cpython-311.pyc
            _variation.cpython-311.pyc
            _warnings_errors.cpython-311.pyc
            wilcoxon.cpython-311.pyc
            __init__.cpython-311.pyc
+---_lib
        decorator.py
        deprecation.py
        doccer.py
       messagestream.cp311-win_amd64.dll.a
        messagestream.cp311-win_amd64.pyd
       uarray.py
       _array_api.py
       _array_api_no_0d.py
        _bunch.py
-
       ccallback.py
        _ccallback_c.cp311-win_amd64.dll.a
       ccallback c.cp311-win amd64.pyd
```

```
_disjoint_set.py
    docscrape.py
    _elementwise_iterative_method.py
    _finite_differences.py
    _fpumode.cp311-win_amd64.dll.a
    fpumode.cp311-win amd64.pyd
    _gcutils.py
    pep440.py
    testutils.py
    _test_ccallback.cp311-win_amd64.dll.a
    test ccallback.cp311-win amd64.pyd
    _test_deprecation_call.cp311-win_amd64.dll.a
    test deprecation call.cp311-win amd64.pyd
    _test_deprecation_def.cp311-win_amd64.dll.a
    test deprecation def.cp311-win amd64.pyd
    _threadsafety.py
    tmpdirs.py
    _util.py
    __init__.py
+---array_api_compat
| | _internal.py
        __init__.py
   +---common
   | | _aliases.py
    | | _fft.py
          helpers.py
           _linalg.py
           typing.py
           __init__.py
    | \---_pycache__
               _aliases.cpython-311.pyc
               _fft.cpython-311.pyc
               helpers.cpython-311.pyc
               _linalg.cpython-311.pyc
               _typing.cpython-311.pyc
                __init__.cpython-311.pyc
   +---cupy
   | | linalg.py
           _aliases.py
            info.py
           _typing.py
            __init__.py
fft.cpython-311.pyc
               linalg.cpython-311.pyc
```

```
_aliases.cpython-311.pyc
                         info.cpython-311.pyc
                         _typing.cpython-311.pyc
                         __init__.cpython-311.pyc
             | +---dask
             1 1 1
               | +---array
                | | fft.py
                | | | linalg.py
                        _aliases.py
                        info.py
                      | __init__.py
               fft.cpython-311.pyc
                           linalg.cpython-311.pyc
                            aliases.cpython-311.pyc
                            _info.cpython-311.pyc
                            __init__.cpython-311.pyc
              1 1 1
                 | \--- pycache
                         __init__.cpython-311.pyc
                +---numpy
             | | fft.py
                | | linalg.py
                | | _aliases.py
             | | info.py
               | | _typing.py
             1 1 1
                | \---_pycache__
                        fft.cpython-311.pyc
                         linalg.cpython-311.pyc
                         _aliases.cpython-311.pyc
                         info.cpython-311.pyc
                         _typing.cpython-311.pyc
                         init .cpython-311.pyc
              | +---torch
             | | fft.py
             | | | linalg.py
                | | aliases.py
             1
             1 1
                        fft.cpython-311.pyc
                         linalg.cpython-311.pyc
```

```
_aliases.cpython-311.pyc
                       info.cpython-311.pyc
                        __init__.cpython-311.pyc
            1 1
internal.cpython-311.pyc
                     __init__.cpython-311.pyc
         | +---array_api_extra
         | | _funcs.py
            | | _typing.py
                 __init__.py
            | \---__pycache__
                     funcs.cpython-311.pyc
                     _typing.cpython-311.pyc
                     __init__.cpython-311.pyc
Ī
            +---cobyqa
         | | framework.py
            | | main.py
            | | models.py
              | problem.py
            | | settings.py
            | | init .py
            | +---subsolvers
            | | geometry.py
            | | optim.py
            geometry.cpython-311.pyc
                       optim.cpython-311.pyc
                        __init__.cpython-311.pyc
            | +---utils
            | | exceptions.py
            | | math.py
            | | | versions.py
            exceptions.cpython-311.pyc
                       math.cpython-311.pyc
                       versions.cpython-311.pyc
I
                        __init__.cpython-311.pyc
       framework.cpython-311.pyc
  main.cpython-311.pyc
```

```
models.cpython-311.pyc
                   problem.cpython-311.pyc
                   settings.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---tests
               test_array_api.py
       test bunch.py
               test_ccallback.py
               test_config.py
               test deprecation.py
           -
               test_doccer.py
               test import cycles.py
               test_public_api.py
               test scipy version.py
               test_tmpdirs.py
               test warnings.py
               test__gcutils.py
               test pep440.py
               test_testutils.py
               test threadsafety.py
               test__util.py
               init .py
          \--- pycache
                   test_array_api.cpython-311.pyc
                   test_bunch.cpython-311.pyc
                   test ccallback.cpython-311.pyc
                   test_config.cpython-311.pyc
                   test deprecation.cpython-311.pyc
                   test_doccer.cpython-311.pyc
                   test_import_cycles.cpython-311.pyc
                   test_public_api.cpython-311.pyc
                   test_scipy_version.cpython-311.pyc
                   test_tmpdirs.cpython-311.pyc
                   test warnings.cpython-311.pyc
                   test__gcutils.cpython-311.pyc
                   test pep440.cpython-311.pyc
                   test__testutils.cpython-311.pyc
                   test threadsafety.cpython-311.pyc
                   test__util.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---_uarray
             LICENSE
          _backend.py
               _uarray.cp311-win_amd64.dll.a
               _uarray.cp311-win_amd64.pyd
       1
               __init__.py
```

```
_backend.cpython-311.pyc
                    __init__.cpython-311.pyc
       \---_pycache_
               decorator.cpython-311.pyc
               deprecation.cpython-311.pyc
               doccer.cpython-311.pyc
               uarray.cpython-311.pyc
                _array_api.cpython-311.pyc
                _array_api_no_0d.cpython-311.pyc
                bunch.cpython-311.pyc
                _ccallback.cpython-311.pyc
                disjoint set.cpython-311.pyc
                _docscrape.cpython-311.pyc
                elementwise iterative method.cpython-311.pyc
                _finite_differences.cpython-311.pyc
                _gcutils.cpython-311.pyc
               _pep440.cpython-311.pyc
                _testutils.cpython-311.pyc
                _threadsafety.cpython-311.pyc
                tmpdirs.cpython-311.pyc
                _util.cpython-311.pyc
                init .cpython-311.pyc
    \---__pycache__
           conftest.cpython-311.pyc
            version.cpython-311.pyc
            distributor init.cpython-311.pyc
            __config__.cpython-311.pyc
            init .cpython-311.pyc
+---scipy-1.15.2.dist-info
       DELVEWHEEL
        INSTALLER
       LICENSE.txt
        METADATA
       RECORD
        WHEEL
+---scipy.libs
       libscipy_openblas-f07f5a5d207a3a47104dca54d6d0c86a.dll
+---seaborn
       algorithms.py
       axisgrid.py
       categorical.py
       cm.py
       distributions.py
matrix.py
       miscplot.py
       objects.py
```

```
| | palettes.py
           rcmod.py
           regression.py
                  relational.py
           utils.py
           widgets.py
                   _base.py
           compat.py
           -
                  _docstrings.py
                  _statistics.py
                  _testing.py
           __init__.py
           1
              +---colors
                  crayons.py
                      xkcd_rgb.py
                      __init__.py
                  \---__pycache__
                          crayons.cpython-311.pyc
                          xkcd rgb.cpython-311.pyc
                          __init__.cpython-311.pyc
              +---external
                      appdirs.py
                      docscrape.py
                      husl.py
                      kde.py
                      version.py
                      __init__.py
                  \---_pycache__
                          appdirs.cpython-311.pyc
                          docscrape.cpython-311.pyc
                          husl.cpython-311.pyc
                          kde.cpython-311.pyc
                          version.cpython-311.pyc
                          __init__.cpython-311.pyc
              +--- core
                 data.py
                      exceptions.py
                      groupby.py
                      moves.py
                      plot.py
                      properties.py
                      rules.py
Ī
                      scales.py
                      subplots.py
                      typing.py
          1 1 1
                      __init__.py
```

```
\---_pycache_
           data.cpython-311.pyc
           exceptions.cpython-311.pyc
           groupby.cpython-311.pyc
           moves.cpython-311.pyc
           plot.cpython-311.pyc
           properties.cpython-311.pyc
           rules.cpython-311.pyc
           scales.cpython-311.pyc
           subplots.cpython-311.pyc
            typing.cpython-311.pyc
            __init__.cpython-311.pyc
+--- marks
  area.py
       bar.py
       base.py
        dot.py
        line.py
        text.py
        __init__.py
    \---_pycache__
           area.cpython-311.pyc
           bar.cpython-311.pyc
           base.cpython-311.pyc
           dot.cpython-311.pyc
           line.cpython-311.pyc
           text.cpython-311.pyc
            __init__.cpython-311.pyc
+---_stats
       aggregation.py
       base.py
        counting.py
       density.py
        order.py
        regression.py
        init .py
    \---_pycache_
           aggregation.cpython-311.pyc
           base.cpython-311.pyc
           counting.cpython-311.pyc
           density.cpython-311.pyc
           order.cpython-311.pyc
           regression.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
```

```
algorithms.cpython-311.pyc
            axisgrid.cpython-311.pyc
            categorical.cpython-311.pyc
            cm.cpython-311.pyc
            distributions.cpython-311.pyc
            matrix.cpython-311.pyc
            miscplot.cpython-311.pyc
            objects.cpython-311.pyc
            palettes.cpython-311.pyc
            rcmod.cpython-311.pyc
            regression.cpython-311.pyc
            relational.cpython-311.pyc
            utils.cpython-311.pyc
            widgets.cpython-311.pyc
            base.cpython-311.pyc
            _compat.cpython-311.pyc
            _docstrings.cpython-311.pyc
            _statistics.cpython-311.pyc
            _testing.cpython-311.pyc
            __init__.cpython-311.pyc
+---seaborn-0.13.2.dist-info
        INSTALLER
        LICENSE.md
        METADATA
        RECORD
        WHEEL
+---setuptools
        archive util.py
        build_meta.py
        cli-32.exe
        cli-64.exe
        cli-arm64.exe
        cli.exe
        depends.py
        dep_util.py
        discovery.py
        dist.py
        errors.py
        extension.py
        glob.py
        gui-32.exe
        gui-64.exe
        qui-arm64.exe
        gui.exe
        installer.py
        launch.py
logging.py
        monkey.py
        msvc.py
```

```
namespaces.py
        package_index.py
py34compat.py
sandbox.py
script (dev).tmpl
        script.tmpl
        unicode_utils.py
        version.py
        wheel.py
        windows_support.py
_deprecation_warning.py
1
        _entry_points.py
1
        imp.py
        _importlib.py
-
        itertools.py
        _path.py
_reqs.py
        __init__.py
    +---command
            alias.py
           bdist_egg.py
           bdist_rpm.py
           build.py
           build clib.py
           build_ext.py
           build_py.py
            develop.py
            dist_info.py
            easy install.py
            editable_wheel.py
            egg_info.py
            install.py
            install_egg_info.py
            install_lib.py
            install scripts.py
            launcher manifest.xml
            py36compat.py
            register.py
            rotate.py
            saveopts.py
            sdist.py
            setopt.py
            test.py
            upload.py
            upload_docs.py
            __init__.py
        \---__pycache__
                alias.cpython-311.pyc
                bdist egg.cpython-311.pyc
```

```
bdist_rpm.cpython-311.pyc
           build.cpython-311.pyc
           build_clib.cpython-311.pyc
            build ext.cpython-311.pyc
           build_py.cpython-311.pyc
            develop.cpython-311.pyc
            dist_info.cpython-311.pyc
            easy install.cpython-311.pyc
            editable_wheel.cpython-311.pyc
            egg_info.cpython-311.pyc
            install.cpython-311.pyc
            install_egg_info.cpython-311.pyc
            install lib.cpython-311.pyc
            install_scripts.cpython-311.pyc
           py36compat.cpython-311.pyc
            register.cpython-311.pyc
            rotate.cpython-311.pyc
            saveopts.cpython-311.pyc
            sdist.cpython-311.pyc
            setopt.cpython-311.pyc
            test.cpython-311.pyc
            upload.cpython-311.pyc
            upload docs.cpython-311.pyc
            __init__.cpython-311.pyc
+---config
        expand.py
       pyprojecttoml.py
        setupcfg.py
        apply pyprojecttoml.py
        __init__.py
   +---_validate_pyproject
           error reporting.py
           extra_validations.py
            fastjsonschema exceptions.py
           fastjsonschema_validations.py
           formats.py
           __init__.py
       \---__pycache__
                error_reporting.cpython-311.pyc
                extra_validations.cpython-311.pyc
                fastjsonschema_exceptions.cpython-311.pyc
                fastjsonschema validations.cpython-311.pyc
                formats.cpython-311.pyc
                init .cpython-311.pyc
   \---__pycache__
           expand.cpython-311.pyc
           pyprojecttoml.cpython-311.pyc
```

```
setupcfg.cpython-311.pyc
                          _apply_pyprojecttoml.cpython-311.pyc
                           __init__.cpython-311.pyc
           +---extern
                  | __init__.py
                   \---_pycache__
                          __init__.cpython-311.pyc
               +---_distutils
                  archive_util.py
                      bcppcompiler.py
                      ccompiler.py
                      cmd.py
                      config.py
ı
                      core.py
                      cygwinccompiler.py
                      debug.py
                      dep_util.py
                      dir_util.py
                      dist.py
ı
                       errors.py
                      extension.py
                       fancy_getopt.py
                       filelist.py
                       file_util.py
ı
                       log.py
                      msvc9compiler.py
                      msvccompiler.py
                      py38compat.py
                      py39compat.py
                       spawn.py
                       sysconfig.py
                      text_file.py
                      unixccompiler.py
                      util.py
                      version.py
                      versionpredicate.py
                      collections.py
                       _functools.py
Τ
                       _macos_compat.py
                      _msvccompiler.py
                      __init__.py
                   +---command
Ī
                   bdist.py
                          bdist_dumb.py
                  - 1
                      -
                          bdist_rpm.py
                          build.py
                   build clib.py
```

```
build_ext.py
       build py.py
       build_scripts.py
        check.py
        clean.py
        config.py
        install.py
        install data.py
        install_egg_info.py
        install_headers.py
        install lib.py
       install_scripts.py
       py37compat.py
        register.py
        sdist.py
        upload.py
        _framework_compat.py
        __init__.py
   \---_pycache_
            bdist.cpython-311.pyc
            bdist_dumb.cpython-311.pyc
            bdist rpm.cpython-311.pyc
            build.cpython-311.pyc
            build clib.cpython-311.pyc
            build ext.cpython-311.pyc
            build_py.cpython-311.pyc
            build scripts.cpython-311.pyc
            check.cpython-311.pyc
            clean.cpython-311.pyc
            config.cpython-311.pyc
            install.cpython-311.pyc
            install_data.cpython-311.pyc
            install_egg_info.cpython-311.pyc
            install_headers.cpython-311.pyc
            install lib.cpython-311.pyc
            install_scripts.cpython-311.pyc
            py37compat.cpython-311.pyc
            register.cpython-311.pyc
            sdist.cpython-311.pyc
            upload.cpython-311.pyc
            _framework_compat.cpython-311.pyc
            __init__.cpython-311.pyc
\--- pycache
        archive_util.cpython-311.pyc
       bcppcompiler.cpython-311.pyc
        ccompiler.cpython-311.pyc
        cmd.cpython-311.pyc
        config.cpython-311.pyc
        core.cpython-311.pyc
```

```
cygwinccompiler.cpython-311.pyc
           debug.cpython-311.pyc
           dep_util.cpython-311.pyc
           dir util.cpython-311.pyc
           dist.cpython-311.pyc
           errors.cpython-311.pyc
           extension.cpython-311.pyc
            fancy getopt.cpython-311.pyc
           filelist.cpython-311.pyc
           file_util.cpython-311.pyc
           log.cpython-311.pyc
           msvc9compiler.cpython-311.pyc
           msvccompiler.cpython-311.pyc
           py38compat.cpython-311.pyc
           py39compat.cpython-311.pyc
           spawn.cpython-311.pyc
           sysconfig.cpython-311.pyc
           text_file.cpython-311.pyc
           unixccompiler.cpython-311.pyc
           util.cpython-311.pyc
           version.cpython-311.pyc
           versionpredicate.cpython-311.pyc
           collections.cpython-311.pyc
           _functools.cpython-311.pyc
           macos compat.cpython-311.pyc
           _msvccompiler.cpython-311.pyc
           __init__.cpython-311.pyc
+---_vendor
       ordered set.py
       typing_extensions.py
       zipp.py
       __init__.py
   +---importlib_metadata
           adapters.py
           _collections.py
           compat.py
           _functools.py
           itertools.py
           _meta.py
           _text.py
           __init__.py
       \--- pycache
               _adapters.cpython-311.pyc
               _collections.cpython-311.pyc
               _compat.cpython-311.pyc
               functools.cpython-311.pyc
               _itertools.cpython-311.pyc
               meta.cpython-311.pyc
```

```
_text.cpython-311.pyc
                        __init__.cpython-311.pyc
              +---importlib resources
| | readers.py
                    simple.py
                    adapters.py
                    _common.py
                 compat.py
              | | _itertools.py
                    _legacy.py
             | \---_pycache_
                        abc.cpython-311.pyc
                        readers.cpython-311.pyc
                        simple.cpython-311.pyc
                        _adapters.cpython-311.pyc
                        _common.cpython-311.pyc
                        compat.cpython-311.pyc
                        _itertools.cpython-311.pyc
                        legacy.cpython-311.pyc
                        __init__.cpython-311.pyc
              +---jaraco
              | | context.py
              | | functools.py
              1 1
              | +---text
             | \---_pycache__
                           __init__.cpython-311.pyc
              | \---__pycache__
                       context.cpython-311.pyc
                       functools.cpython-311.pyc
                        init .cpython-311.pyc
              +---more_itertools
        | | recipes.py
              | | __init__.py
              Ī
              | \---__pycache__
                       more.cpython-311.pyc
        1 1
                       recipes.cpython-311.pyc
                        __init__.cpython-311.pyc
        1 1
```

```
+---packaging
        markers.py
   requirements.py
        specifiers.py
        tags.py
        utils.py
        version.py
         manylinux.py
        _musllinux.py
        _structures.py
        __about__.py
        __init__.py
    \---__pycache__
            markers.cpython-311.pyc
            requirements.cpython-311.pyc
            specifiers.cpython-311.pyc
            tags.cpython-311.pyc
            utils.cpython-311.pyc
            version.cpython-311.pyc
            manylinux.cpython-311.pyc
            _musllinux.cpython-311.pyc
            structures.cpython-311.pyc
             __about__.cpython-311.pyc
             init .cpython-311.pyc
 +---pyparsing
        actions.py
        common.py
        core.py
        exceptions.py
        helpers.py
        results.py
        testing.py
        unicode.py
        util.py
        __init__.py
    +---diagram
     | | init .py
     1 1
        \---_pycache__
                __init__.cpython-311.pyc
     \--- pycache
            actions.cpython-311.pyc
            common.cpython-311.pyc
            core.cpython-311.pyc
            exceptions.cpython-311.pyc
            helpers.cpython-311.pyc
            results.cpython-311.pyc
```

```
testing.cpython-311.pyc
               unicode.cpython-311.pyc
               util.cpython-311.pyc
                __init__.cpython-311.pyc
   +---tomli
   _parser.py
           re.py
           _types.py
           __init__.py
   - [
       1
      \---__pycache__
               _parser.cpython-311.pyc
               _re.cpython-311.pyc
               types.cpython-311.pyc
               __init__.cpython-311.pyc
   \---__pycache__
           ordered set.cpython-311.pyc
           typing_extensions.cpython-311.pyc
            zipp.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache_
       archive util.cpython-311.pyc
       build meta.cpython-311.pyc
       depends.cpython-311.pyc
       dep util.cpython-311.pyc
       discovery.cpython-311.pyc
       dist.cpython-311.pyc
       errors.cpython-311.pyc
        extension.cpython-311.pyc
        glob.cpython-311.pyc
        installer.cpython-311.pyc
        launch.cpython-311.pyc
        logging.cpython-311.pyc
       monkey.cpython-311.pyc
       msvc.cpython-311.pyc
       namespaces.cpython-311.pyc
       package index.cpython-311.pyc
       py34compat.cpython-311.pyc
        sandbox.cpython-311.pyc
       unicode_utils.cpython-311.pyc
       version.cpython-311.pyc
        wheel.cpython-311.pyc
       windows_support.cpython-311.pyc
       _deprecation_warning.cpython-311.pyc
       _entry_points.cpython-311.pyc
        imp.cpython-311.pyc
        _importlib.cpython-311.pyc
       itertools.cpython-311.pyc
```

```
_path.cpython-311.pyc
           _reqs.cpython-311.pyc
           __init__.cpython-311.pyc
+---setuptools-65.5.0.dist-info
-
       entry_points.txt
       INSTALLER
       LICENSE
       METADATA
       RECORD
       REQUESTED
       top_level.txt
       WHEEL
+---six-1.17.0.dist-info
       INSTALLER
       LICENSE
       METADATA
       RECORD
       top_level.txt
       WHEEL
+---sniffio
| py.typed
      impl.py
       _version.py
       __init__.py
   +---_tests
   | | test_sniffio.py
      | __init__.py
      - 1
      \---_pycache__
               test_sniffio.cpython-311.pyc
               __init__.cpython-311.pyc
   \---__pycache__
           impl.cpython-311.pyc
           _version.cpython-311.pyc
           __init__.cpython-311.pyc
+---sniffio-1.3.1.dist-info
       INSTALLER
LICENSE
       LICENSE.APACHE2
       LICENSE.MIT
       METADATA
       RECORD
       top_level.txt
       WHEEL
```

```
+---starlette
applications.py
   authentication.py
       background.py
concurrency.py
       config.py
convertors.py
datastructures.py
       endpoints.py
exceptions.py
1
       formparsers.py
       py.typed
1
       requests.py
responses.py
routing.py
schemas.py
       staticfiles.py
       status.py
templating.py
testclient.py
types.py
       websockets.py
exception handler.py
       _utils.py
init .py
   +---middleware
           authentication.py
           base.py
   1
           cors.py
           errors.py
           exceptions.py
           gzip.py
           httpsredirect.py
           sessions.py
           trustedhost.py
           wsgi.py
           __init__.py
       \--- pycache
               authentication.cpython-311.pyc
               base.cpython-311.pyc
               cors.cpython-311.pyc
               errors.cpython-311.pyc
               exceptions.cpython-311.pyc
               gzip.cpython-311.pyc
               https://direct.cpython-311.pyc
               sessions.cpython-311.pyc
trustedhost.cpython-311.pyc
               wsgi.cpython-311.pyc
               __init__.cpython-311.pyc
```

```
\---_pycache_
           applications.cpython-311.pyc
           authentication.cpython-311.pyc
           background.cpython-311.pyc
           concurrency.cpython-311.pyc
           config.cpython-311.pyc
           convertors.cpython-311.pyc
           datastructures.cpython-311.pyc
           endpoints.cpython-311.pyc
           exceptions.cpython-311.pyc
           formparsers.cpython-311.pyc
           requests.cpython-311.pyc
           responses.cpython-311.pyc
           routing.cpython-311.pyc
           schemas.cpython-311.pyc
           staticfiles.cpython-311.pyc
           status.cpython-311.pyc
           templating.cpython-311.pyc
           testclient.cpython-311.pyc
           types.cpython-311.pyc
           websockets.cpython-311.pyc
           exception handler.cpython-311.pyc
           _utils.cpython-311.pyc
           init .cpython-311.pyc
+---starlette-0.46.1.dist-info
       INSTALLER
       METADATA
       RECORD
       WHEEL
   \---licenses
           LICENSE.md
+---sympy
       abc.py
       conftest.py
       galgebra.py
       release.py
       this.py
       __init__.py
   +---algebras
          quaternion.py
           __init__.py
      +---tests
      | | test_quaternion.py
```

```
test_quaternion.cpython-311.pyc
                             __init__.cpython-311.pyc
                 \---__pycache__
                        quaternion.cpython-311.pyc
                         __init__.cpython-311.pyc
              +---assumptions
                     ask.py
                     ask_generated.py
                      assume.py
                     cnf.py
                      facts.py
                     lra satask.py
                    refine.py
                      satask.py
                      sathandlers.py
                      wrapper.py
                      __init__.py
                 +---handlers
                        calculus.py
                         common.py
                         matrices.py
                         ntheory.py
                         order.py
                         sets.py
                         __init__.py
                 - 1
                    \---__pycache__
                             calculus.cpython-311.pyc
                             common.cpython-311.pyc
                             matrices.cpython-311.pyc
                             ntheory.cpython-311.pyc
                             order.cpython-311.pyc
                             sets.cpython-311.pyc
                             __init__.cpython-311.pyc
                 +---predicates
                 | | calculus.py
                         common.py
                         matrices.py
                         ntheory.py
                         order.py
                         sets.py
Ī
                         __init__.py
                 \---__pycache__
                             calculus.cpython-311.pyc
                             common.cpython-311.pyc
```

```
matrices.cpython-311.pyc
            ntheory.cpython-311.pyc
            order.cpython-311.pyc
            sets.cpython-311.pyc
            __init__.cpython-311.pyc
+---relation
      binrel.py
        equality.py
        __init__.py
   1
   \---__pycache__
           binrel.cpython-311.pyc
            equality.cpython-311.pyc
            init .cpython-311.pyc
+---tests
        test_assumptions_2.py
        test context.py
        test_matrices.py
        test query.py
        test_refine.py
        test rel queries.py
        test_satask.py
        test sathandlers.py
        test wrapper.py
        __init__.py
   \---__pycache__
            test assumptions 2.cpython-311.pyc
            test_context.cpython-311.pyc
            test_matrices.cpython-311.pyc
            test_query.cpython-311.pyc
            test_refine.cpython-311.pyc
            test_rel_queries.cpython-311.pyc
            test satask.cpython-311.pyc
            test_sathandlers.cpython-311.pyc
            test wrapper.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        ask.cpython-311.pyc
        ask_generated.cpython-311.pyc
        assume.cpython-311.pyc
        cnf.cpython-311.pyc
        facts.cpython-311.pyc
        lra_satask.cpython-311.pyc
        refine.cpython-311.pyc
        satask.cpython-311.pyc
        sathandlers.cpython-311.pyc
        wrapper.cpython-311.pyc
```

```
__init__.cpython-311.pyc
| +---benchmarks
     | bench_discrete_log.py
   | | bench_meijerint.py
      | bench_symbench.py
       | __init__.py
      \---__pycache__
             bench_discrete_log.cpython-311.pyc
              bench meijerint.cpython-311.pyc
              bench_symbench.cpython-311.pyc
              __init__.cpython-311.pyc
  +---calculus
| | accumulationbounds.py
      | euler.py
      | finite_diff.py
         singularities.py
         util.py
          init .py
      +---tests
   | | test_accumulationbounds.py
       | | test euler.py
         | test_finite_diff.py
          | test_singularities.py
         | test util.py
      | \---_pycache__
                 test accumulationbounds.cpython-311.pyc
                 test_euler.cpython-311.pyc
                 test_finite_diff.cpython-311.pyc
                 test_singularities.cpython-311.pyc
                 test util.cpython-311.pyc
                  __init__.cpython-311.pyc
      \---__pycache__
              accumulationbounds.cpython-311.pyc
              euler.cpython-311.pyc
              finite_diff.cpython-311.pyc
              singularities.cpython-311.pyc
              util.cpython-311.pyc
              __init__.cpython-311.pyc
| +---categories
| | baseclasses.py
     | diagram drawing.py
     | __init__.py
```

```
+---tests
                  | test_baseclasses.py
                   1 1
                          test_drawing.py
                           __init__.py
                   \---_pycache_
                              test_baseclasses.cpython-311.pyc
                              test drawing.cpython-311.pyc
                               __init__.cpython-311.pyc
                   \---_pycache__
                          baseclasses.cpython-311.pyc
                          diagram drawing.cpython-311.pyc
                          __init__.cpython-311.pyc
               +---codegen
                      abstract_nodes.py
                       algorithms.py
                       approximations.py
                       ast.py
                       cfunctions.py
                       cnodes.py
                       cutils.py
                       cxxnodes.py
                       fnodes.py
                       futils.py
                      matrix_nodes.py
                      numpy_nodes.py
                       pynodes.py
                      pyutils.py
                       rewriting.py
                       scipy_nodes.py
                       __init__.py
                   +---tests
                          test_abstract_nodes.py
                          test_algorithms.py
                          test applications.py
                          test_approximations.py
                          test ast.py
                          test_cfunctions.py
                          test_cnodes.py
                          test_cxxnodes.py
                          test_fnodes.py
                          test_matrix_nodes.py
                          test_numpy_nodes.py
ı
                          test_pynodes.py
                          test_pyutils.py
                  test_rewriting.py
                          test_scipy_nodes.py
           __init__.py
```

```
\--- pycache
                test_abstract_nodes.cpython-311.pyc
                test algorithms.cpython-311.pyc
                test_applications.cpython-311.pyc
                test approximations.cpython-311.pyc
                test_ast.cpython-311.pyc
                test cfunctions.cpython-311.pyc
                test_cnodes.cpython-311.pyc
                test_cxxnodes.cpython-311.pyc
                test_fnodes.cpython-311.pyc
                test_matrix_nodes.cpython-311.pyc
                test numpy nodes.cpython-311.pyc
                test_pynodes.cpython-311.pyc
                test pyutils.cpython-311.pyc
                test_rewriting.cpython-311.pyc
                test_scipy_nodes.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
            abstract nodes.cpython-311.pyc
            algorithms.cpython-311.pyc
            approximations.cpython-311.pyc
            ast.cpython-311.pyc
            cfunctions.cpython-311.pyc
            cnodes.cpython-311.pyc
            cutils.cpython-311.pyc
            cxxnodes.cpython-311.pyc
            fnodes.cpython-311.pyc
            futils.cpython-311.pyc
            matrix_nodes.cpython-311.pyc
            numpy_nodes.cpython-311.pyc
           pynodes.cpython-311.pyc
            pyutils.cpython-311.pyc
            rewriting.cpython-311.pyc
            scipy nodes.cpython-311.pyc
            __init__.cpython-311.pyc
+---combinatorics
        coset table.py
        fp_groups.py
        free_groups.py
       galois.py
        generators.py
       graycode.py
       group_constructs.py
       group_numbers.py
       homomorphisms.py
       named_groups.py
       partitions.py
       pc groups.py
```

```
permutations.py
                        perm_groups.py
                        polyhedron.py
                        prufer.py
                        rewritingsystem.py
                        rewritingsystem fsm.py
                        schur_number.py
                        subsets.py
                        tensor_can.py
                        testutil.py
                        util.py
                        __init__.py
                    +---tests
                            test coset table.py
                            test_fp_groups.py
                            test_free_groups.py
                            test_galois.py
                            test generators.py
                            test_graycode.py
                            test group constructs.py
                            test_group_numbers.py
                            test homomorphisms.py
                            test_named_groups.py
                            test partitions.py
                            test_pc_groups.py
                            test_permutations.py
                            test_perm_groups.py
                            test_polyhedron.py
                            test prufer.py
                    1
                        ı
                            test_rewriting.py
                            test_schur_number.py
                            test_subsets.py
                            test_tensor_can.py
                            test_testutil.py
                            test util.py
                            __init__.py
                        \---_pycache__
                                test coset table.cpython-311.pyc
                                test_fp_groups.cpython-311.pyc
                                test_free_groups.cpython-311.pyc
                                test_galois.cpython-311.pyc
                                test_generators.cpython-311.pyc
                                test graycode.cpython-311.pyc
                                test_group_constructs.cpython-311.pyc
ı
                                test_group_numbers.cpython-311.pyc
                                test_homomorphisms.cpython-311.pyc
                                test_named_groups.cpython-311.pyc
                                test_partitions.cpython-311.pyc
                                test pc groups.cpython-311.pyc
```

```
test_permutations.cpython-311.pyc
                test perm groups.cpython-311.pyc
                test_polyhedron.cpython-311.pyc
                test prufer.cpython-311.pyc
                test_rewriting.cpython-311.pyc
                test schur number.cpython-311.pyc
                test_subsets.cpython-311.pyc
                test tensor can.cpython-311.pyc
                test_testutil.cpython-311.pyc
                test_util.cpython-311.pyc
                __init__.cpython-311.pyc
    \--- pycache
           coset_table.cpython-311.pyc
           fp_groups.cpython-311.pyc
           free_groups.cpython-311.pyc
           galois.cpython-311.pyc
           generators.cpython-311.pyc
           graycode.cpython-311.pyc
           group_constructs.cpython-311.pyc
           group numbers.cpython-311.pyc
           homomorphisms.cpython-311.pyc
           named groups.cpython-311.pyc
           partitions.cpython-311.pyc
           pc groups.cpython-311.pyc
           permutations.cpython-311.pyc
           perm_groups.cpython-311.pyc
           polyhedron.cpython-311.pyc
           prufer.cpython-311.pyc
           rewritingsystem.cpython-311.pyc
           {\tt rewritingsystem\_fsm.cpython-311.pyc}
           schur number.cpython-311.pyc
           subsets.cpython-311.pyc
           tensor can.cpython-311.pyc
           testutil.cpython-311.pyc
           util.cpython-311.pyc
            __init__.cpython-311.pyc
+---concrete
       delta.py
       expr_with_intlimits.py
       expr_with_limits.py
       gosper.py
        guess.py
       products.py
        summations.py
        init .py
   +---tests
          test_delta.py
   test gosper.py
```

```
test_guess.py
            test_products.py
            test_sums_products.py
            __init__.py
   -
        \---_pycache__
                test_delta.cpython-311.pyc
                test gosper.cpython-311.pyc
                test_guess.cpython-311.pyc
                test_products.cpython-311.pyc
                test_sums_products.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
            delta.cpython-311.pyc
            expr_with_intlimits.cpython-311.pyc
            expr_with_limits.cpython-311.pyc
            gosper.cpython-311.pyc
            guess.cpython-311.pyc
            products.cpython-311.pyc
            summations.cpython-311.pyc
            __init__.cpython-311.pyc
+---core
        add.py
        alphabets.py
        assumptions.py
        assumptions_generated.py
       backend.py
       basic.py
        cache.py
        compatibility.py
        containers.py
        core.py
        coreerrors.py
        decorators.py
        evalf.py
        expr.py
        exprtools.py
        facts.py
        function.py
        intfunc.py
        kind.py
        logic.py
        mod.py
       mul.py
       multidimensional.py
        numbers.py
        operations.py
        parameters.py
        power.py
```

```
random.py
                        relational.py
                        rules.py
                        singleton.py
                        sorting.py
                        symbol.py
                        sympify.py
                        trace.py
                        traversal.py
                        _print_helpers.py
                        __init__.py
                    +---benchmarks
                            bench_arit.py
                            bench assumptions.py
                            bench_basic.py
                            bench_expand.py
                            bench_numbers.py
                            bench_sympify.py
                            __init__.py
                        \---_pycache__
                                bench arit.cpython-311.pyc
                               bench_assumptions.cpython-311.pyc
                                bench basic.cpython-311.pyc
                                bench expand.cpython-311.pyc
                                bench_numbers.cpython-311.pyc
                               bench sympify.cpython-311.pyc
                                __init__.cpython-311.pyc
                    +---tests
                            test_args.py
                            test_arit.py
                            test_assumptions.py
                            test_basic.py
                            test cache.py
                            test_compatibility.py
                            test complex.py
                            test_constructor_postprocessor.py
                            test containers.py
                            test_count_ops.py
                            test_diff.py
                            test_equal.py
                            test_eval.py
                            test evalf.py
                            test_expand.py
ı
                            test_expr.py
                            test_exprtools.py
                            test_facts.py
                   test_function.py
                            test kind.py
```

```
test_logic.py
   test match.py
   test_multidimensional.py
   test noncommutative.py
   test_numbers.py
    test operations.py
   test_parameters.py
   test power.py
   test_priority.py
   test_random.py
   test relational.py
   test_rules.py
   test singleton.py
   test_sorting.py
   test subs.py
   test_symbol.py
   test_sympify.py
   test_traversal.py
   test truediv.py
   test_var.py
    init .py
\--- pycache
        test_args.cpython-311.pyc
        test arit.cpython-311.pyc
        test_assumptions.cpython-311.pyc
        test_basic.cpython-311.pyc
        test cache.cpython-311.pyc
        test_compatibility.cpython-311.pyc
        test complex.cpython-311.pyc
        test_constructor_postprocessor.cpython-311.pyc
        test containers.cpython-311.pyc
        test_count_ops.cpython-311.pyc
        test diff.cpython-311.pyc
        test_equal.cpython-311.pyc
        test eval.cpython-311.pyc
        test_evalf.cpython-311.pyc
        test expand.cpython-311.pyc
        test_expr.cpython-311.pyc
        test exprtools.cpython-311.pyc
        test_facts.cpython-311.pyc
        test_function.cpython-311.pyc
        test_kind.cpython-311.pyc
        test_logic.cpython-311.pyc
        test match.cpython-311.pyc
        {\tt test\_multidimensional.cpython-311.pyc}
        test_noncommutative.cpython-311.pyc
        test_numbers.cpython-311.pyc
        test operations.cpython-311.pyc
        test_parameters.cpython-311.pyc
        test power.cpython-311.pyc
```

```
test_priority.cpython-311.pyc
            test random.cpython-311.pyc
            test_relational.cpython-311.pyc
            test rules.cpython-311.pyc
            test_singleton.cpython-311.pyc
            test sorting.cpython-311.pyc
            test_subs.cpython-311.pyc
            test symbol.cpython-311.pyc
            test_sympify.cpython-311.pyc
            test_traversal.cpython-311.pyc
            test truediv.cpython-311.pyc
            test_var.cpython-311.pyc
            init .cpython-311.pyc
\---_pycache_
        add.cpython-311.pyc
        alphabets.cpython-311.pyc
        assumptions.cpython-311.pyc
        assumptions generated.cpython-311.pyc
        backend.cpython-311.pyc
        basic.cpython-311.pyc
        cache.cpython-311.pyc
        compatibility.cpython-311.pyc
        containers.cpython-311.pyc
        core.cpython-311.pyc
        coreerrors.cpython-311.pyc
        decorators.cpython-311.pyc
        evalf.cpython-311.pyc
        expr.cpython-311.pyc
        exprtools.cpython-311.pyc
        facts.cpython-311.pyc
        function.cpython-311.pyc
        intfunc.cpython-311.pyc
        kind.cpython-311.pyc
        logic.cpython-311.pyc
        mod.cpython-311.pyc
        mul.cpython-311.pyc
        multidimensional.cpython-311.pyc
        numbers.cpython-311.pyc
        operations.cpython-311.pyc
        parameters.cpython-311.pyc
        power.cpython-311.pyc
        random.cpython-311.pyc
        relational.cpython-311.pyc
        rules.cpython-311.pyc
        singleton.cpython-311.pyc
        sorting.cpython-311.pyc
        symbol.cpython-311.pyc
        sympify.cpython-311.pyc
        trace.cpython-311.pyc
        traversal.cpython-311.pyc
```

```
_print_helpers.cpython-311.pyc
                  __init__.cpython-311.pyc
       | +---crypto
       | | crypto.py
       | | | test_crypto.py
         test crypto.cpython-311.pyc
                    __init__.cpython-311.pyc
       | \---_pycache__
                crypto.cpython-311.pyc
                  __init__.cpython-311.pyc
       1 1
       | +---diffgeom
       | | diffgeom.py
       | | rn.py
1
            | __init__.py
       | | test_class_structure.py
       | | | test_diffgeom.py
Ī
            | | test function diffgeom book.py
         | | test_hyperbolic_space.py
       1 1 1
       test_class_structure.cpython-311.pyc
                    test diffgeom.cpython-311.pyc
                    test_function_diffgeom_book.cpython-311.pyc
                   test hyperbolic space.cpython-311.pyc
                    __init__.cpython-311.pyc
       | \---_pycache__
                 diffgeom.cpython-311.pyc
                 rn.cpython-311.pyc
                  __init__.cpython-311.pyc
       | +---discrete
       | | convolutions.py
       | | recurrences.py
I
         | | transforms.py
       1 1 1
       | | | test convolutions.py
```

```
| test_recurrences.py
              test transforms.py
               __init__.py
      \---_pycache_
                   test convolutions.cpython-311.pyc
                   test_recurrences.cpython-311.pyc
                   test transforms.cpython-311.pyc
                   __init__.cpython-311.pyc
       \---_pycache__
               convolutions.cpython-311.pyc
               recurrences.cpython-311.pyc
               transforms.cpython-311.pyc
               __init__.cpython-311.pyc
   +---external
      gmpy.py
           importtools.py
       ntheory.py
           pythonmpq.py
           __init__.py
      +---tests
       | | test autowrap.py
               test_codegen.py
               test_gmpy.py
               test importtools.py
               test_ntheory.py
       1
           1
               test numpy.py
               test_pythonmpq.py
               test_scipy.py
           __init__.py
          \---_pycache_
                   test_autowrap.cpython-311.pyc
                   test_codegen.cpython-311.pyc
                   test gmpy.cpython-311.pyc
                   test_importtools.cpython-311.pyc
                   test ntheory.cpython-311.pyc
                   test_numpy.cpython-311.pyc
                   test_pythonmpq.cpython-311.pyc
                   test_scipy.cpython-311.pyc
                   __init__.cpython-311.pyc
       \---__pycache__
               gmpy.cpython-311.pyc
               importtools.cpython-311.pyc
ntheory.cpython-311.pyc
               pythonmpq.cpython-311.pyc
               init .cpython-311.pyc
```

```
1 1
| +---functions
       | +---combinatorial
1
          | | | factorials.py
1
            | | numbers.py
1
            | +---tests
            | | test_comb_factorials.py
            | | test_comb_numbers.py
            1
            test_comb_factorials.cpython-311.pyc
Ī
                       test_comb_numbers.cpython-311.pyc
                       __init__.cpython-311.pyc
            1
            | \---__pycache__
                   factorials.cpython-311.pyc
1
                    numbers.cpython-311.pyc
                     __init__.cpython-311.pyc
+---elementary
            | | complexes.py
            | | exponential.py
            | | hyperbolic.py
1
            | | integers.py
            | | miscellaneous.py
            | | piecewise.py
            | | trigonometric.py
            | _trigonometric_special.py
              | __init__.py
1
            1 1
            | +---benchmarks
1
            | | bench_exp.py
            1
            | | \--- pycache
            1
                      bench_exp.cpython-311.pyc
                       __init__.cpython-311.pyc
       | +---tests
            | | test complexes.py
            | | test_exponential.py
Ī
            | | test_hyperbolic.py
            | | test_integers.py
       | | | test_interface.py
1
           | | test_miscellaneous.py
      | | | | test piecewise.py
```

```
| test_trigonometric.py
           init .py
  \---_pycache_
               test_complexes.cpython-311.pyc
               test exponential.cpython-311.pyc
               test_hyperbolic.cpython-311.pyc
               test integers.cpython-311.pyc
               test_interface.cpython-311.pyc
               test_miscellaneous.cpython-311.pyc
               test piecewise.cpython-311.pyc
               test_trigonometric.cpython-311.pyc
               init .cpython-311.pyc
   \---_pycache_
           complexes.cpython-311.pyc
           exponential.cpython-311.pyc
           hyperbolic.cpython-311.pyc
           integers.cpython-311.pyc
           miscellaneous.cpython-311.pyc
           piecewise.cpython-311.pyc
           trigonometric.cpython-311.pyc
           trigonometric special.cpython-311.pyc
           __init__.cpython-311.pyc
+---special
       bessel.py
       beta functions.py
       bsplines.py
       delta functions.py
       elliptic_integrals.py
       error functions.py
       gamma_functions.py
       hyper.py
       mathieu_functions.py
       polynomials.py
       singularity_functions.py
       spherical harmonics.py
       tensor_functions.py
       zeta functions.py
       __init__.py
  +---benchmarks
   | | bench_special.py
           __init__.py
  \---_pycache_
               bench_special.cpython-311.pyc
               __init__.cpython-311.pyc
  +---tests
```

```
test_bessel.py
            test beta functions.py
            test_bsplines.py
    -
            test delta functions.py
            test_elliptic_integrals.py
            test error functions.py
            test_gamma_functions.py
            test hyper.py
            test mathieu.py
            test_singularity_functions.py
            test_spec_polynomials.py
            test_spherical_harmonics.py
            test tensor functions.py
            test_zeta_functions.py
            init .py
        \--- pycache
                test_bessel.cpython-311.pyc
                test beta functions.cpython-311.pyc
                test_bsplines.cpython-311.pyc
                test delta functions.cpython-311.pyc
                test_elliptic_integrals.cpython-311.pyc
                test error functions.cpython-311.pyc
                test_gamma_functions.cpython-311.pyc
                test hyper.cpython-311.pyc
                test mathieu.cpython-311.pyc
                test_singularity_functions.cpython-311.pyc
                test spec polynomials.cpython-311.pyc
                test_spherical_harmonics.cpython-311.pyc
                test tensor functions.cpython-311.pyc
                test_zeta_functions.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            bessel.cpython-311.pyc
            beta functions.cpython-311.pyc
            bsplines.cpython-311.pyc
            delta functions.cpython-311.pyc
            elliptic_integrals.cpython-311.pyc
            error functions.cpython-311.pyc
            gamma_functions.cpython-311.pyc
            hyper.cpython-311.pyc
            mathieu_functions.cpython-311.pyc
            polynomials.cpython-311.pyc
            singularity functions.cpython-311.pyc
            spherical_harmonics.cpython-311.pyc
            tensor_functions.cpython-311.pyc
            zeta_functions.cpython-311.pyc
            init .cpython-311.pyc
\---_pycache__
```

```
__init__.cpython-311.pyc
+---geometry
   curve.py
        ellipse.py
        entity.py
        exceptions.py
        line.py
       parabola.py
        plane.py
       point.py
        polygon.py
        util.py
        __init__.py
    +---tests
           test_curve.py
           test_ellipse.py
           test_entity.py
           test_geometrysets.py
            test line.py
           test_parabola.py
           test plane.py
           test_point.py
            test polygon.py
           test_util.py
            __init__.py
        \---_pycache__
                test curve.cpython-311.pyc
                test_ellipse.cpython-311.pyc
                test_entity.cpython-311.pyc
                test_geometrysets.cpython-311.pyc
                test_line.cpython-311.pyc
                test_parabola.cpython-311.pyc
                test plane.cpython-311.pyc
                test_point.cpython-311.pyc
                test polygon.cpython-311.pyc
                test_util.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache__
           curve.cpython-311.pyc
            ellipse.cpython-311.pyc
           entity.cpython-311.pyc
           exceptions.cpython-311.pyc
           line.cpython-311.pyc
           parabola.cpython-311.pyc
           plane.cpython-311.pyc
           point.cpython-311.pyc
           polygon.cpython-311.pyc
```

```
util.cpython-311.pyc
                       __init__.cpython-311.pyc
            +---holonomic
| | holonomic.py
                  holonomicerrors.py
                   numerical.py
                   recurrence.py
                   __init__.py
               +---tests
               | test_holonomic.py
               | | test recurrence.py
               | \---__pycache__
                         test_holonomic.cpython-311.pyc
                          test_recurrence.cpython-311.pyc
                          __init__.cpython-311.pyc
               \---_pycache__
                      holonomic.cpython-311.pyc
                       holonomicerrors.cpython-311.pyc
                      numerical.cpython-311.pyc
                      recurrence.cpython-311.pyc
                       __init__.cpython-311.pyc
            +---integrals
            | | deltafunctions.py
               | heurisch.py
                  integrals.py
                   intpoly.py
               laplace.py
                   manualintegrate.py
               | meijerint.py
                   meijerint doc.py
                   prde.py
                   quadrature.py
                  rationaltools.py
                  rde.py
                   risch.py
                   singularityfunctions.py
                  transforms.py
               trigonometry.py
                   __init__.py
               Ī
           | +---benchmarks
            | | bench_integrate.py
               | | bench_trigintegrate.py
```

```
\---_pycache_
           bench integrate.cpython-311.pyc
           bench_trigintegrate.cpython-311.pyc
            __init__.cpython-311.pyc
       test_deltafunctions.py
        test failing integrals.py
        test_heurisch.py
        test_integrals.py
        test intpoly.py
        test_laplace.py
        test lineintegrals.py
        test_manual.py
        test meijerint.py
        test_prde.py
        test_quadrature.py
        test_rationaltools.py
        test rde.py
       test_risch.py
        test singularityfunctions.py
       test_transforms.py
        test trigonometry.py
        __init__.py
    \--- pycache
            test_deltafunctions.cpython-311.pyc
            test failing integrals.cpython-311.pyc
            test_heurisch.cpython-311.pyc
            test integrals.cpython-311.pyc
            test_intpoly.cpython-311.pyc
            test_laplace.cpython-311.pyc
            test_lineintegrals.cpython-311.pyc
            test manual.cpython-311.pyc
            test_meijerint.cpython-311.pyc
            test prde.cpython-311.pyc
            test_quadrature.cpython-311.pyc
            test rationaltools.cpython-311.pyc
            test_rde.cpython-311.pyc
            test risch.cpython-311.pyc
            test_singularityfunctions.cpython-311.pyc
            test_transforms.cpython-311.pyc
            test_trigonometry.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
       deltafunctions.cpython-311.pyc
       heurisch.cpython-311.pyc
        integrals.cpython-311.pyc
       intpoly.cpython-311.pyc
        laplace.cpython-311.pyc
```

```
manualintegrate.cpython-311.pyc
               meijerint.cpython-311.pyc
               meijerint_doc.cpython-311.pyc
               prde.cpython-311.pyc
               quadrature.cpython-311.pyc
               rationaltools.cpython-311.pyc
               rde.cpython-311.pyc
               risch.cpython-311.pyc
               singularityfunctions.cpython-311.pyc
               transforms.cpython-311.pyc
               trigonometry.cpython-311.pyc
               __init__.cpython-311.pyc
    +---interactive
           printing.py
           session.py
           traversal.py
            __init__.py
       +---tests
       | | test_interactive.py
       | test_ipython.py
               __init__.py
       \---__pycache__
                   test_interactive.cpython-311.pyc
                   test_ipython.cpython-311.pyc
                   __init__.cpython-311.pyc
        \---_pycache__
               printing.cpython-311.pyc
               session.cpython-311.pyc
               traversal.cpython-311.pyc
               __init__.cpython-311.pyc
    +---liealgebras
           cartan_matrix.py
           cartan_type.py
           dynkin_diagram.py
            root system.py
            type_a.py
            type_b.py
            type_c.py
            type_d.py
            type_e.py
            type_f.py
            type_g.py
            weyl_group.py
            __init__.py
| | +---tests
```

```
test_cartan_matrix.py
            test_cartan_type.py
           test_dynkin_diagram.py
            test_root_system.py
            test_type_A.py
            test type B.py
           test_type_C.py
            test type D.py
            test_type_E.py
            test_type_F.py
           test type G.py
            test_weyl_group.py
            init .py
   \--- pycache
               test_cartan_matrix.cpython-311.pyc
               test_cartan_type.cpython-311.pyc
                test_dynkin_diagram.cpython-311.pyc
                test_root_system.cpython-311.pyc
                test_type_A.cpython-311.pyc
                test type B.cpython-311.pyc
                test_type_C.cpython-311.pyc
                test type D.cpython-311.pyc
                test_type_E.cpython-311.pyc
                test type F.cpython-311.pyc
               test_type_G.cpython-311.pyc
                test_weyl_group.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache__
            cartan_matrix.cpython-311.pyc
            cartan_type.cpython-311.pyc
            dynkin_diagram.cpython-311.pyc
            root system.cpython-311.pyc
            type_a.cpython-311.pyc
            type b.cpython-311.pyc
            type_c.cpython-311.pyc
            type d.cpython-311.pyc
            type_e.cpython-311.pyc
            type f.cpython-311.pyc
            type_g.cpython-311.pyc
            weyl_group.cpython-311.pyc
            __init__.cpython-311.pyc
+---logic
       boolalg.py
       inference.py
        __init__.py
   -
   +---algorithms
  | | dpll.py
```

```
| | | dpl12.py
                 | | lra_theory.py
                 | | minisat22_wrapper.py
                         pycosat_wrapper.py
                         z3_wrapper.py
                         init .py
                    \---__pycache__
                             dpl1.cpython-311.pyc
                             dpl12.cpython-311.pyc
                             lra theory.cpython-311.pyc
                             minisat22_wrapper.cpython-311.pyc
                             pycosat wrapper.cpython-311.pyc
                             z3_wrapper.cpython-311.pyc
                             __init__.cpython-311.pyc
                 +---tests
                 | | test_boolalg.py
                  | | test dimacs.py
                        test_inference.py
                         test lra theory.py
                         __init__.py
                    - 1
                  | \---__pycache__
                             test boolalg.cpython-311.pyc
                             test_dimacs.cpython-311.pyc
                             test_inference.cpython-311.pyc
                             test lra theory.cpython-311.pyc
                             __init__.cpython-311.pyc
                  1
                 +---utilities
                 | | dimacs.py
                    | __init__.py
                     \---_pycache_
                             dimacs.cpython-311.pyc
                             __init__.cpython-311.pyc
                 \---__pycache__
                         boolalg.cpython-311.pyc
                         inference.cpython-311.pyc
                         __init__.cpython-311.pyc
              +---matrices
                 - 1
                     common.py
                 decompositions.py
ı
                     dense.py
                      determinant.py
                 eigen.py
                      exceptions.py
                      graph.py
```

```
immutable.py
                       inverse.py
                       kind.py
                       matrices.py
                       matrixbase.py
                       normalforms.py
                       reductions.py
                       repmatrix.py
                       solvers.py
1
                       sparse.py
                       sparsetools.py
                       subspaces.py
                       utilities.py
ı
                       __init__.py
                   +---benchmarks
                       | bench_matrix.py
ı
                           __init__.py
                   \---_pycache__
                               bench matrix.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---expressions
                           adjoint.py
                           applyfunc.py
                           blockmatrix.py
                           companion.py
ı
                           determinant.py
                           diagonal.py
                   1
                       1
                           dotproduct.py
                           factorizations.py
                           fourier.py
                   funcmatrix.py
                           hadamard.py
                           inverse.py
                           kronecker.py
                           matadd.py
                           matexpr.py
                           matmul.py
                           matpow.py
                           permutation.py
                           sets.py
                   slice.py
                           special.py
                   trace.py
Ī
                           transpose.py
                           _shape.py
                           __init__.py
                   +---tests
```

```
test_adjoint.py
                                test_applyfunc.py
                                test_blockmatrix.py
                        1
                                test companion.py
                                test_derivatives.py
                                test determinant.py
                                test_diagonal.py
                                test dotproduct.py
                                test_factorizations.py
                                test_fourier.py
                                test funcmatrix.py
                        test_hadamard.py
                                test indexing.py
                                test_inverse.py
                                test kronecker.py
                                test_matadd.py
                                test_matexpr.py
1
                                test_matmul.py
                                test matpow.py
                        test_permutation.py
                                test sets.py
                                test_slice.py
                        test special.py
                                test_trace.py
                                test transpose.py
                                __init__.py
                            \--- pycache
                                    test_adjoint.cpython-311.pyc
                                    test applyfunc.cpython-311.pyc
                                    test_blockmatrix.cpython-311.pyc
                                    test_companion.cpython-311.pyc
                                    test_derivatives.cpython-311.pyc
                                    test determinant.cpython-311.pyc
                                    test_diagonal.cpython-311.pyc
                                    test dotproduct.cpython-311.pyc
                                    test_factorizations.cpython-311.pyc
                                    test fourier.cpython-311.pyc
                                    {\tt test\_funcmatrix.cpython-311.pyc}
                                    test hadamard.cpython-311.pyc
                                    test_indexing.cpython-311.pyc
                                    test_inverse.cpython-311.pyc
                                    test_kronecker.cpython-311.pyc
                                    test_matadd.cpython-311.pyc
                                    test matexpr.cpython-311.pyc
                                    test_matmul.cpython-311.pyc
ı
                                    test_matpow.cpython-311.pyc
                                    test_permutation.cpython-311.pyc
                                    test sets.cpython-311.pyc
                                    test_slice.cpython-311.pyc
                                    test special.cpython-311.pyc
```

```
test_trace.cpython-311.pyc
                test_transpose.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache_
            adjoint.cpython-311.pyc
            applyfunc.cpython-311.pyc
            blockmatrix.cpython-311.pyc
            companion.cpython-311.pyc
            determinant.cpython-311.pyc
            diagonal.cpython-311.pyc
            dotproduct.cpython-311.pyc
            factorizations.cpython-311.pyc
            fourier.cpython-311.pyc
            funcmatrix.cpython-311.pyc
            hadamard.cpython-311.pyc
            inverse.cpython-311.pyc
            kronecker.cpython-311.pyc
            matadd.cpython-311.pyc
            matexpr.cpython-311.pyc
            matmul.cpython-311.pyc
            matpow.cpython-311.pyc
            permutation.cpython-311.pyc
            sets.cpython-311.pyc
            slice.cpython-311.pyc
            special.cpython-311.pyc
            trace.cpython-311.pyc
            transpose.cpython-311.pyc
            _shape.cpython-311.pyc
            init .cpython-311.pyc
+---tests
        test_commonmatrix.py
        test_decompositions.py
        test_determinant.py
        test domains.py
        test_eigen.py
        test graph.py
        test_immutable.py
        test interactions.py
        test_matrices.py
    -
        test_matrixbase.py
        test_normalforms.py
        test_reductions.py
        test repmatrix.py
        test_solvers.py
        test_sparse.py
        test_sparsetools.py
test subspaces.py
        __init__.py
```

```
\---_pycache_
                test commonmatrix.cpython-311.pyc
                test_decompositions.cpython-311.pyc
                test determinant.cpython-311.pyc
                test_domains.cpython-311.pyc
                test eigen.cpython-311.pyc
                test_graph.cpython-311.pyc
                test immutable.cpython-311.pyc
                test_interactions.cpython-311.pyc
                test_matrices.cpython-311.pyc
                test matrixbase.cpython-311.pyc
                test_normalforms.cpython-311.pyc
                test reductions.cpython-311.pyc
                test_repmatrix.cpython-311.pyc
                test solvers.cpython-311.pyc
                test_sparse.cpython-311.pyc
                test_sparsetools.cpython-311.pyc
                test_subspaces.cpython-311.pyc
                init .cpython-311.pyc
   \---_pycache__
           common.cpython-311.pyc
           decompositions.cpython-311.pyc
           dense.cpython-311.pyc
           determinant.cpython-311.pyc
           eigen.cpython-311.pyc
           exceptions.cpython-311.pyc
           graph.cpython-311.pyc
           immutable.cpython-311.pyc
           inverse.cpython-311.pyc
           kind.cpython-311.pyc
           matrices.cpython-311.pyc
           matrixbase.cpython-311.pyc
           normalforms.cpython-311.pyc
           reductions.cpython-311.pyc
           repmatrix.cpython-311.pyc
           solvers.cpython-311.pyc
           sparse.cpython-311.pyc
           sparsetools.cpython-311.pyc
           subspaces.cpython-311.pyc
           utilities.cpython-311.pyc
            __init__.cpython-311.pyc
+---multipledispatch
       conflict.py
       core.py
       dispatcher.py
       utils.py
        __init__.py
   +---tests
```

```
test_conflict.py
                           test_core.py
                           test_dispatcher.py
                           __init__.py
                   \---_pycache__
                               test_conflict.cpython-311.pyc
                               test_core.cpython-311.pyc
                              test_dispatcher.cpython-311.pyc
                               __init__.cpython-311.pyc
                   \---__pycache__
                           conflict.cpython-311.pyc
                           core.cpython-311.pyc
                           dispatcher.cpython-311.pyc
                           utils.cpython-311.pyc
                           __init__.cpython-311.pyc
               +---ntheory
                  bbp_pi.py
                       continued fraction.py
                       digits.py
                       ecm.py
                       egyptian_fraction.py
                       elliptic_curve.py
                       factor_.py
                       generate.py
                       modular.py
                       multinomial.py
                       partitions .py
                       primetest.py
                       qs.py
                       residue_ntheory.py
                       __init__.py
                   +---tests
                           test_bbp_pi.py
                           test continued fraction.py
                           test_digits.py
                           test ecm.py
                           test_egyptian_fraction.py
                           test_elliptic_curve.py
                   1
                       1
                           test_factor_.py
                           test_generate.py
                           test hypothesis.py
                   test_modular.py
                       ı
                           test_multinomial.py
                           test_partitions.py
                  test primetest.py
                           test_qs.py
                 1 1
                           test residue.py
```

```
\---_pycache_
               test_bbp_pi.cpython-311.pyc
               test_continued_fraction.cpython-311.pyc
               test digits.cpython-311.pyc
               test_ecm.cpython-311.pyc
               test egyptian fraction.cpython-311.pyc
               test_elliptic_curve.cpython-311.pyc
               test_factor_.cpython-311.pyc
               test generate.cpython-311.pyc
               test_hypothesis.cpython-311.pyc
               test modular.cpython-311.pyc
               test_multinomial.cpython-311.pyc
               test partitions.cpython-311.pyc
               test_primetest.cpython-311.pyc
               test_qs.cpython-311.pyc
               test_residue.cpython-311.pyc
               __init__.cpython-311.pyc
   \---_pycache__
           bbp_pi.cpython-311.pyc
           continued fraction.cpython-311.pyc
           digits.cpython-311.pyc
           ecm.cpython-311.pyc
           egyptian fraction.cpython-311.pyc
           elliptic_curve.cpython-311.pyc
           factor .cpython-311.pyc
           generate.cpython-311.pyc
           modular.cpython-311.pyc
           multinomial.cpython-311.pyc
           partitions_.cpython-311.pyc
           primetest.cpython-311.pyc
           qs.cpython-311.pyc
           residue_ntheory.cpython-311.pyc
           init .cpython-311.pyc
+---parsing
       ast_parser.py
       mathematica.py
       maxima.py
       sympy_parser.py
       sym_expr.py
       __init__.py
   +---autolev
          Autolev.g4
           _build_autolev_antlr.py
           _listener_autolev_antlr.py
          _parse_autolev_antlr.py
  init .py
```

```
+---test-examples
       README.txt
        ruletest1.al
        ruletest1.py
        ruletest10.al
        ruletest10.py
        ruletest11.al
        ruletest11.py
        ruletest12.al
        ruletest12.py
        ruletest2.al
        ruletest2.py
        ruletest3.al
        ruletest3.py
        ruletest4.al
        ruletest4.py
        ruletest5.al
        ruletest5.py
        ruletest6.al
        ruletest6.py
        ruletest7.al
        ruletest7.py
        ruletest8.al
        ruletest8.py
        ruletest9.al
        ruletest9.py
   +---pydy-example-repo
            chaos pendulum.al
   1
            chaos_pendulum.py
            double_pendulum.al
            double_pendulum.py
            mass_spring_damper.al
           mass_spring_damper.py
            non min pendulum.al
            non_min_pendulum.py
        \---_pycache__
                chaos pendulum.cpython-311.pyc
                double_pendulum.cpython-311.pyc
                mass_spring_damper.cpython-311.pyc
                non_min_pendulum.cpython-311.pyc
   \--- pycache
            ruletest1.cpython-311.pyc
            ruletest10.cpython-311.pyc
            ruletest11.cpython-311.pyc
            ruletest12.cpython-311.pyc
            ruletest2.cpython-311.pyc
            ruletest3.cpython-311.pyc
```

```
ruletest4.cpython-311.pyc
                  ruletest5.cpython-311.pyc
                  ruletest6.cpython-311.pyc
                  ruletest7.cpython-311.pyc
                  ruletest8.cpython-311.pyc
                  ruletest9.cpython-311.pyc
      | +--- antlr
      | | autolevlexer.py
      | | autolevlistener.py
      | | autolevparser.py
      autolevlexer.cpython-311.pyc
                  autolevlistener.cpython-311.pyc
                  autolevparser.cpython-311.pyc
                   __init__.cpython-311.pyc
      | \---__pycache__
               build autolev antlr.cpython-311.pyc
               _listener_autolev_antlr.cpython-311.pyc
               parse autolev antlr.cpython-311.pyc
               __init__.cpython-311.pyc
   | | c_parser.py
      | \---__pycache__
              c_parser.cpython-311.pyc
                __init__.cpython-311.pyc
      +---fortran
 | | | fortran_parser.py
      | \---_pycache__
              fortran_parser.cpython-311.pyc
               init .cpython-311.pyc
      +---latex
 | | | errors.py
      | | LaTeX.g4
      | | LICENSE.txt
      | | _build_latex_antlr.py
      | | _parse_latex_antlr.py
 | | +---lark
| | | | latex parser.py
```

```
| | | transformer.py
     | | +---grammar
     greek_symbols.lark
                   latex.lark
        | \---_pycache__
                   latex parser.cpython-311.pyc
                    transformer.cpython-311.pyc
                    __init__.cpython-311.pyc
         +--- antlr
     | | latexlexer.py
        | | latexparser.py
       latexlexer.cpython-311.pyc
                   latexparser.cpython-311.pyc
                    init .cpython-311.pyc
        \---__pycache__
                errors.cpython-311.pyc
                build latex antlr.cpython-311.pyc
                 _parse_latex_antlr.cpython-311.pyc
                 __init__.cpython-311.pyc
     +---tests
     | | test ast parser.py
        | test_autolev.py
            test_custom_latex.py
        | test_c_parser.py
            test_fortran_parser.py
            test_implicit_multiplication_application.py
             test latex.py
             test_latex_deps.py
             test latex lark.py
             test_mathematica.py
             test maxima.py
             test_sympy_parser.py
             test_sym_expr.py
             __init__.py
        - 1
         \--- pycache
                 test_ast_parser.cpython-311.pyc
                 test_autolev.cpython-311.pyc
                 test_custom_latex.cpython-311.pyc
                 test c parser.cpython-311.pyc
                 test_fortran_parser.cpython-311.pyc
| |
                 test implicit multiplication application.cpython-311.pyc
```

```
test_latex.cpython-311.pyc
               test latex deps.cpython-311.pyc
               test_latex_lark.cpython-311.pyc
               test mathematica.cpython-311.pyc
               test_maxima.cpython-311.pyc
               test sympy parser.cpython-311.pyc
               test_sym_expr.cpython-311.pyc
                init .cpython-311.pyc
   \---_pycache_
           ast_parser.cpython-311.pyc
           mathematica.cpython-311.pyc
           maxima.cpython-311.pyc
           sympy_parser.cpython-311.pyc
           sym expr.cpython-311.pyc
           __init__.cpython-311.pyc
+---physics
       hydrogen.py
       matrices.py
       paulialgebra.py
       pring.py
       qho 1d.py
       secondquant.py
       sho.py
       wigner.py
       __init__.py
   +---biomechanics
          activation.py
          curve.py
           musculotendon.py
           _mixin.py
           __init__.py
       +---tests
      | | test_activation.py
               test curve.py
               test_mixin.py
               test musculotendon.py
               __init__.py
       \---_pycache_
                   test_activation.cpython-311.pyc
                   test_curve.cpython-311.pyc
                   test_mixin.cpython-311.pyc
                   test_musculotendon.cpython-311.pyc
                   __init__.cpython-311.pyc
   \---__pycache__
               activation.cpython-311.pyc
```

```
curve.cpython-311.pyc
                       musculotendon.cpython-311.pyc
                       _mixin.cpython-311.pyc
                       __init__.cpython-311.pyc
             +---continuum mechanics
          | | beam.py
             | | cable.py
              | | truss.py
             | +---tests
             | | test beam.py
             | | test_cable.py
             | | test truss.py
             1 1 1
Ī
             test beam.cpython-311.pyc
                         test_cable.cpython-311.pyc
                         test truss.cpython-311.pyc
                          __init__.cpython-311.pyc
             | \---_pycache__
                      beam.cpython-311.pyc
                       cable.cpython-311.pyc
                       truss.cpython-311.pyc
                       __init__.cpython-311.pyc
             +---control
             | control_plots.py
             | | lti.py
             | | +---tests
             | | test_control_plots.py
             | | test_lti.py
             | | \--- pycache
                         test_control_plots.cpython-311.pyc
                         test_lti.cpython-311.pyc
                          __init__.cpython-311.pyc
                \---__pycache__
                       control_plots.cpython-311.pyc
Ī
                      lti.cpython-311.pyc
                       __init__.cpython-311.pyc
        1 1
             | | +---hep
       | | | gamma matrices.py
```

```
+---tests
                    | | test_gamma_matrices.py
1
                     \---__pycache__
                                test gamma matrices.cpython-311.pyc
                                __init__.cpython-311.pyc
                    \---__pycache__
                            gamma_matrices.cpython-311.pyc
                            __init__.cpython-311.pyc
                 +---mechanics
                | | actuator.py
                        body.py
ı
                        body_base.py
                        functions.py
ı
                        inertia.py
                        joint.py
                        jointsmethod.py
I
                     -
                        kane.py
                        lagrange.py
                        linearize.py
                        loads.py
                        method.py
ī
                        models.py
                        particle.py
                        pathway.py
                 1
                     1
                        rigidbody.py
                        system.py
                        wrapping_geometry.py
                        __init__.py
                    +---tests
1
                    test_actuator.py
                            test body.py
I
                            test_functions.py
                            test inertia.py
                            test_joint.py
                        Τ
                            test_jointsmethod.py
                            test_kane.py
                        test_kane2.py
                            test kane3.py
                        test_kane4.py
                    Ī
                            test_kane5.py
                            test_lagrange.py
                   test_lagrange2.py
                            test_linearize.py
                   test loads.py
```

```
test_method.py
        test models.py
        test_particle.py
test pathway.py
        test_rigidbody.py
        test system.py
        test_system_class.py
        test wrapping geometry.py
        __init__.py
   \---_pycache_
            {\tt test\_actuator.cpython-311.pyc}
            test body.cpython-311.pyc
            test_functions.cpython-311.pyc
            test inertia.cpython-311.pyc
            test_joint.cpython-311.pyc
            test jointsmethod.cpython-311.pyc
            test_kane.cpython-311.pyc
            test kane2.cpython-311.pyc
            test_kane3.cpython-311.pyc
            test kane4.cpython-311.pyc
            test_kane5.cpython-311.pyc
            test lagrange.cpython-311.pyc
            test_lagrange2.cpython-311.pyc
            test linearize.cpython-311.pyc
            test loads.cpython-311.pyc
            test_method.cpython-311.pyc
            test models.cpython-311.pyc
            test_particle.cpython-311.pyc
            test pathway.cpython-311.pyc
            test_rigidbody.cpython-311.pyc
            test_system.cpython-311.pyc
            test_system_class.cpython-311.pyc
            test_wrapping_geometry.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        actuator.cpython-311.pyc
        body.cpython-311.pyc
        body base.cpython-311.pyc
        functions.cpython-311.pyc
        inertia.cpython-311.pyc
        joint.cpython-311.pyc
        jointsmethod.cpython-311.pyc
        kane.cpython-311.pyc
        lagrange.cpython-311.pyc
        linearize.cpython-311.pyc
        loads.cpython-311.pyc
        method.cpython-311.pyc
        models.cpython-311.pyc
        particle.cpython-311.pyc
```

```
pathway.cpython-311.pyc
                               rigidbody.cpython-311.pyc
                               system.cpython-311.pyc
                               wrapping geometry.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---optics
                           gaussopt.py
                           medium.py
                           polarization.py
                           utils.py
                           waves.py
                           __init__.py
                       +---tests
                     1 1
                               test_gaussopt.py
                               test_medium.py
                               test_polarization.py
                               test utils.py
                               test_waves.py
                               init .py
                         \--- pycache
                                   test_gaussopt.cpython-311.pyc
                                   test medium.cpython-311.pyc
                                   test_polarization.cpython-311.pyc
                                   test_utils.cpython-311.pyc
                                   test waves.cpython-311.pyc
                                   __init__.cpython-311.pyc
                       \---__pycache__
                               gaussopt.cpython-311.pyc
                               medium.cpython-311.pyc
                               polarization.cpython-311.pyc
                               utils.cpython-311.pyc
                               waves.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---quantum
                           anticommutator.py
                      - 1
                           boson.py
                           cartesian.py
                           cg.py
                           circuitplot.py
                           circuitutils.py
                           commutator.py
ı
                           constants.py
                           dagger.py
                   1
                           density.py
                           fermion.py
                           gate.py
```

```
grover.py
                            hilbert.py
                            identitysearch.py
                            innerproduct.py
                            matrixcache.py
                            matrixutils.py
                            operator.py
                            operatorordering.py
                            operatorset.py
1
                            pauli.py
                            piab.py
                    1
                            qapply.py
ı
                            qasm.py
                            qexpr.py
                            qft.py
                            qubit.py
                            represent.py
ı
                            shold.py
                    1
                            shor.py
                            spin.py
                            state.py
                            tensorproduct.py
                            trace.py
                            __init__.py
                        +---tests
                                 test_anticommutator.py
ı
                                 test_boson.py
                                 test_cartesian.py
                                 test cg.py
                        ı
                                 test_circuitplot.py
                                 test_circuitutils.py
ı
                                 test_commutator.py
                                 test_constants.py
                                 test_dagger.py
                                 test_density.py
                                 test_fermion.py
                                 test gate.py
                                 test_grover.py
                                 test hilbert.py
                                 test_identitysearch.py
                                 test_innerproduct.py
                                 test_matrixutils.py
                                 test_operator.py
                                 test operatorordering.py
                                 test_operatorset.py
ı
                                 test_pauli.py
                                 test_piab.py
                        test_printing.py
                                 test_qapply.py
                                 test_qasm.py
```

```
test_qexpr.py
         test_qft.py
         test_qubit.py
 test represent.py
         test_shold.py
         test shor.py
         test_spin.py
         test state.py
         test tensorproduct.py
         test_trace.py
         __init__.py
 1
     \---_pycache__
             test_anticommutator.cpython-311.pyc
             test boson.cpython-311.pyc
             test_cartesian.cpython-311.pyc
             test_cg.cpython-311.pyc
             test_circuitplot.cpython-311.pyc
             test circuitutils.cpython-311.pyc
             test_commutator.cpython-311.pyc
             test constants.cpython-311.pyc
             test_dagger.cpython-311.pyc
             test density.cpython-311.pyc
             test_fermion.cpython-311.pyc
             test gate.cpython-311.pyc
             test grover.cpython-311.pyc
             test_hilbert.cpython-311.pyc
             test identitysearch.cpython-311.pyc
             test_innerproduct.cpython-311.pyc
             test matrixutils.cpython-311.pyc
             test_operator.cpython-311.pyc
             test operatorordering.cpython-311.pyc
             test_operatorset.cpython-311.pyc
             test pauli.cpython-311.pyc
             test_piab.cpython-311.pyc
             test printing.cpython-311.pyc
             test_qapply.cpython-311.pyc
             test qasm.cpython-311.pyc
             test_qexpr.cpython-311.pyc
             test qft.cpython-311.pyc
             test_qubit.cpython-311.pyc
             test_represent.cpython-311.pyc
             test_shold.cpython-311.pyc
             test_shor.cpython-311.pyc
             test spin.cpython-311.pyc
             test_state.cpython-311.pyc
             test_tensorproduct.cpython-311.pyc
             test_trace.cpython-311.pyc
             init .cpython-311.pyc
\--- pycache
```

```
anticommutator.cpython-311.pyc
            boson.cpython-311.pyc
            cartesian.cpython-311.pyc
            cg.cpython-311.pyc
            circuitplot.cpython-311.pyc
            circuitutils.cpython-311.pyc
            commutator.cpython-311.pyc
            constants.cpython-311.pyc
            dagger.cpython-311.pyc
            density.cpython-311.pyc
            fermion.cpython-311.pyc
            gate.cpython-311.pyc
            grover.cpython-311.pyc
            hilbert.cpython-311.pyc
            identitysearch.cpython-311.pyc
            innerproduct.cpython-311.pyc
            matrixcache.cpython-311.pyc
            matrixutils.cpython-311.pyc
            operator.cpython-311.pyc
            operatorordering.cpython-311.pyc
            operatorset.cpython-311.pyc
            pauli.cpython-311.pyc
            piab.cpython-311.pyc
            qapply.cpython-311.pyc
            qasm.cpython-311.pyc
            qexpr.cpython-311.pyc
            qft.cpython-311.pyc
            qubit.cpython-311.pyc
            represent.cpython-311.pyc
            shold.cpython-311.pyc
            shor.cpython-311.pyc
            spin.cpython-311.pyc
            state.cpython-311.pyc
            tensorproduct.cpython-311.pyc
            trace.cpython-311.pyc
            init .cpython-311.pyc
+---tests
        test_clebsch_gordan.py
        test hydrogen.py
        test_paulialgebra.py
        test_physics_matrices.py
        test_pring.py
        test_qho_1d.py
        test secondquant.py
        test_sho.py
        init__.py
   \---__pycache__
            test_clebsch_gordan.cpython-311.pyc
            test hydrogen.cpython-311.pyc
```

```
test_paulialgebra.cpython-311.pyc
           test physics matrices.cpython-311.pyc
           test_pring.cpython-311.pyc
           test qho 1d.cpython-311.pyc
           test_secondquant.cpython-311.pyc
           test sho.cpython-311.pyc
           __init__.cpython-311.pyc
 +---units
dimensions.py
 | | prefixes.py
       quantities.py
       unitsystem.py
       util.py
   init .py
   +---definitions
   | | dimension_definitions.py
   | | unit definitions.py
   \---__pycache__
   - 1
              dimension definitions.cpython-311.pyc
              unit_definitions.cpython-311.pyc
               init .cpython-311.pyc
 | +---systems
   | | cgs.py
   | length_weight_time.py
   1 1
           mks.py
          mksa.py
           natural.py
   si.py
           __init__.py
    \---_pycache__
              cgs.cpython-311.pyc
              length weight time.cpython-311.pyc
              mks.cpython-311.pyc
              mksa.cpython-311.pyc
              natural.cpython-311.pyc
              si.cpython-311.pyc
               __init__.cpython-311.pyc
   +---tests
 | | test_dimensions.py
    | test_dimensionsystem.py
           test_prefixes.py
   test quantities.py
   | | test_unitsystem.py
| | test unit system cgs gauss.py
```

```
test_util.py
            __init__.py
       \---_pycache_
               test_dimensions.cpython-311.pyc
                test dimensionsystem.cpython-311.pyc
                test_prefixes.cpython-311.pyc
                test quantities.cpython-311.pyc
               test_unitsystem.cpython-311.pyc
                test_unit_system_cgs_gauss.cpython-311.pyc
                test util.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            dimensions.cpython-311.pyc
            prefixes.cpython-311.pyc
            quantities.cpython-311.pyc
            unitsystem.cpython-311.pyc
           util.cpython-311.pyc
            __init__.cpython-311.pyc
+---vector
       dyadic.py
       fieldfunctions.py
        frame.py
       functions.py
       point.py
       printing.py
       vector.py
        init .py
    +---tests
    | test_dyadic.py
            test fieldfunctions.py
            test_frame.py
            test functions.py
            test_output.py
            test point.py
            test_printing.py
            test vector.py
            __init__.py
       \---_pycache_
                test_dyadic.cpython-311.pyc
                test fieldfunctions.cpython-311.pyc
                test_frame.cpython-311.pyc
                test_functions.cpython-311.pyc
                test_output.cpython-311.pyc
                test point.cpython-311.pyc
                test_printing.cpython-311.pyc
                test vector.cpython-311.pyc
```

```
__init__.cpython-311.pyc
      \---__pycache__
              dyadic.cpython-311.pyc
              fieldfunctions.cpython-311.pyc
              frame.cpython-311.pyc
              functions.cpython-311.pyc
              point.cpython-311.pyc
              printing.cpython-311.pyc
              vector.cpython-311.pyc
              __init__.cpython-311.pyc
    \--- pycache
           hydrogen.cpython-311.pyc
           matrices.cpython-311.pyc
           paulialgebra.cpython-311.pyc
           pring.cpython-311.pyc
           qho_1d.cpython-311.pyc
           secondquant.cpython-311.pyc
           sho.cpython-311.pyc
           wigner.cpython-311.pyc
           __init__.cpython-311.pyc
+---plotting
       experimental lambdify.py
       plot.py
       plotgrid.py
      plot_implicit.py
       series.py
       textplot.py
       utils.py
       __init__.py
   +---backends
   | | base_backend.py
      | __init__.py
      +---matplotlibbackend
      | | matplotlib.py
      | | init .py
    1 1 1
         \---__pycache__
                 matplotlib.cpython-311.pyc
                  __init__.cpython-311.pyc
  | +---textbackend
   | | text.py
   text.cpython-311.pyc
```

```
__init__.cpython-311.pyc
     | \---_pycache__
                 base backend.cpython-311.pyc
                 __init__.cpython-311.pyc
      +---intervalmath
      | | interval arithmetic.py
         | interval_membership.py
             lib_interval.py
              __init__.py
         - 1
         +---tests
      | | test_intervalmath.py
         | | test interval functions.py
         | test_interval_membership.py
            | __init__.py
         \---_pycache__
          test_intervalmath.cpython-311.pyc
                    test_interval_functions.cpython-311.pyc
                    test_interval_membership.cpython-311.pyc
                     __init__.cpython-311.pyc
          \---__pycache__
                 interval_arithmetic.cpython-311.pyc
                 interval_membership.cpython-311.pyc
                 lib interval.cpython-311.pyc
                 __init__.cpython-311.pyc
      - [
      +---pygletplot
      | color_scheme.py
         | managed_window.py
             plot.py
             plot_axes.py
             plot_camera.py
             plot_controller.py
             plot curve.py
          plot_interval.py
             plot mode.py
             plot_modes.py
         plot_mode_base.py
      plot_object.py
             plot_rotation.py
             plot surface.py
          | plot_window.py
             util.py
              __init__.py
      | +---tests
| | | test plotting.py
```

```
\---_pycache_
   test_plotting.cpython-311.pyc
                 __init__.cpython-311.pyc
     \---__pycache__
             color scheme.cpython-311.pyc
             managed window.cpython-311.pyc
             plot.cpython-311.pyc
             plot axes.cpython-311.pyc
             plot_camera.cpython-311.pyc
             plot controller.cpython-311.pyc
             plot_curve.cpython-311.pyc
             plot interval.cpython-311.pyc
             plot_mode.cpython-311.pyc
             plot_modes.cpython-311.pyc
             plot_mode_base.cpython-311.pyc
             plot object.cpython-311.pyc
             plot_rotation.cpython-311.pyc
             plot surface.cpython-311.pyc
             plot_window.cpython-311.pyc
             util.cpython-311.pyc
             __init__.cpython-311.pyc
 +---tests
         test_experimental_lambdify.py
         test plot.py
         test_plot_implicit.py
         test region and.png
         test_region_not.png
         test_region_or.png
         test_region_xor.png
         test series.py
         test_textplot.py
         test utils.py
         __init__.py
     \---__pycache__
             test experimental lambdify.cpython-311.pyc
             test_plot.cpython-311.pyc
             test_plot_implicit.cpython-311.pyc
             test_series.cpython-311.pyc
             test_textplot.cpython-311.pyc
             test utils.cpython-311.pyc
             __init__.cpython-311.pyc
 \---__pycache__
         experimental lambdify.cpython-311.pyc
         plot.cpython-311.pyc
         plotgrid.cpython-311.pyc
```

```
plot_implicit.cpython-311.pyc
            series.cpython-311.pyc
            textplot.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---polys
        appellseqs.py
        compatibility.py
        constructor.py
   1
        densearith.py
        densebasic.py
        densetools.py
        dispersion.py
        distributedmodules.py
        domainmatrix.py
        euclidtools.py
        factortools.py
        fglmtools.py
        fields.py
        galoistools.py
        groebnertools.py
        heuristicgcd.py
        modulargcd.py
        monomials.py
        multivariate_resultants.py
        orderings.py
        orthopolys.py
        partfrac.py
        polyclasses.py
        polyconfig.py
        polyerrors.py
        polyfuncs.py
        polymatrix.py
        polyoptions.py
        polyquinticconst.py
        polyroots.py
        polytools.py
        polyutils.py
        rationaltools.py
        rings.py
        ring_series.py
        rootisolation.py
        rootoftools.py
        solvers.py
        specialpolys.py
        sqfreetools.py
        subresultants_qq_zz.py
        __init__.py
   +---agca
```

```
extensions.py
        homomorphisms.py
        ideals.py
1 1
        modules.py
        __init__.py
    +---tests
    | test_extensions.py
    | test_homomorphisms.py
            test_ideals.py
   1 1
           test modules.py
           __init__.py
    | \---_pycache__
                test extensions.cpython-311.pyc
                test_homomorphisms.cpython-311.pyc
                test_ideals.cpython-311.pyc
                test_modules.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            extensions.cpython-311.pyc
            homomorphisms.cpython-311.pyc
            ideals.cpython-311.pyc
            modules.cpython-311.pyc
            __init__.cpython-311.pyc
+---benchmarks
| | bench_galoispolys.py
   | bench groebnertools.py
      bench_solvers.py
        __init__.py
   \---__pycache__
            bench_galoispolys.cpython-311.pyc
            bench groebnertools.cpython-311.pyc
            bench_solvers.cpython-311.pyc
            __init__.cpython-311.pyc
+---domains
 | | algebraicfield.py
        characteristiczero.py
        complexfield.py
        compositedomain.py
        domain.py
domainelement.py
        expressiondomain.py
        expressionrawdomain.py
field.py
       finitefield.py
       fractionfield.py
```

```
gaussiandomains.py
    gmpyfinitefield.py
    gmpyintegerring.py
    gmpyrationalfield.py
    groundtypes.py
    integerring.py
   modularinteger.py
    mpelements.py
   old fractionfield.py
    old_polynomialring.py
    polynomialring.py
   pythonfinitefield.py
   pythonintegerring.py
    pythonrational.py
   pythonrationalfield.py
   quotientring.py
    rationalfield.py
    realfield.py
    ring.py
   simpledomain.py
    init .py
+---tests
        test_domains.py
1 1
        test polynomialring.py
        test quotientring.py
        __init__.py
   \---__pycache__
           test domains.cpython-311.pyc
           test_polynomialring.cpython-311.pyc
            test quotientring.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        algebraicfield.cpython-311.pyc
        characteristiczero.cpython-311.pyc
        complexfield.cpython-311.pyc
        compositedomain.cpython-311.pyc
        domain.cpython-311.pyc
        domainelement.cpython-311.pyc
        expressiondomain.cpython-311.pyc
        expressionrawdomain.cpython-311.pyc
        field.cpython-311.pyc
        finitefield.cpython-311.pyc
        fractionfield.cpython-311.pyc
        gaussiandomains.cpython-311.pyc
        gmpyfinitefield.cpython-311.pyc
        gmpyintegerring.cpython-311.pyc
        gmpyrationalfield.cpython-311.pyc
        groundtypes.cpython-311.pyc
```

```
integerring.cpython-311.pyc
             modularinteger.cpython-311.pyc
             mpelements.cpython-311.pyc
             old fractionfield.cpython-311.pyc
             old_polynomialring.cpython-311.pyc
             polynomialring.cpython-311.pyc
             pythonfinitefield.cpython-311.pyc
             pythonintegerring.cpython-311.pyc
             pythonrational.cpython-311.pyc
             pythonrationalfield.cpython-311.pyc
             quotientring.cpython-311.pyc
             rationalfield.cpython-311.pyc
             realfield.cpython-311.pyc
             ring.cpython-311.pyc
             simpledomain.cpython-311.pyc
             __init__.cpython-311.pyc
 +---matrices
         ddm.py
         dense.py
         dfm.py
         domainmatrix.py
         domainscalar.py
         eigen.py
         exceptions.py
         linsolve.py
         lll.py
         normalforms.py
         rref.py
         sdm.py
         _dfm.py
         _typing.py
         __init__.py
     +---tests
             test ddm.py
             test_dense.py
             test domainmatrix.py
             test_domainscalar.py
             test eigen.py
             test_inverse.py
             test_linsolve.py
             test_lll.py
             test_normalforms.py
             test nullspace.py
             test_rref.py
             test_sdm.py
             test_xxm.py
    -
             __init__.py
| | \--- pycache
```

```
test_ddm.cpython-311.pyc
                test dense.cpython-311.pyc
                test_domainmatrix.cpython-311.pyc
                test domainscalar.cpython-311.pyc
                test_eigen.cpython-311.pyc
                test inverse.cpython-311.pyc
                test_linsolve.cpython-311.pyc
                test lll.cpython-311.pyc
                test normalforms.cpython-311.pyc
                test_nullspace.cpython-311.pyc
                test rref.cpython-311.pyc
                test_sdm.cpython-311.pyc
                test xxm.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache_
            ddm.cpython-311.pyc
            dense.cpython-311.pyc
            dfm.cpython-311.pyc
            domainmatrix.cpython-311.pyc
            domainscalar.cpython-311.pyc
            eigen.cpython-311.pyc
            exceptions.cpython-311.pyc
            linsolve.cpython-311.pyc
            111.cpython-311.pyc
            normalforms.cpython-311.pyc
            rref.cpython-311.pyc
            sdm.cpython-311.pyc
            _dfm.cpython-311.pyc
            typing.cpython-311.pyc
            __init__.cpython-311.pyc
+---numberfields
       basis.py
        exceptions.py
        galoisgroups.py
       galois_resolvents.py
       minpoly.py
       modules.py
       primes.py
        resolvent_lookup.py
        subfield.py
       utilities.py
        __init__.py
   +---tests
            test_basis.py
            test_galoisgroups.py
            test_minpoly.py
   test_modules.py
            test numbers.py
```

```
test_primes.py
            test subfield.py
            test_utilities.py
    -
            init .py
        \--- pycache
                test_basis.cpython-311.pyc
                test galoisgroups.cpython-311.pyc
                test_minpoly.cpython-311.pyc
                test_modules.cpython-311.pyc
                test numbers.cpython-311.pyc
                test_primes.cpython-311.pyc
                test subfield.cpython-311.pyc
                test_utilities.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache__
            basis.cpython-311.pyc
            exceptions.cpython-311.pyc
            galoisgroups.cpython-311.pyc
            galois resolvents.cpython-311.pyc
            minpoly.cpython-311.pyc
            modules.cpython-311.pyc
            primes.cpython-311.pyc
            resolvent lookup.cpython-311.pyc
            subfield.cpython-311.pyc
            utilities.cpython-311.pyc
            init .cpython-311.pyc
+---tests
        test_appellseqs.py
        test_constructor.py
        test_densearith.py
        test densebasic.py
        test_densetools.py
        test dispersion.py
        test_distributedmodules.py
        test euclidtools.py
        test_factortools.py
        test fields.py
        test_galoistools.py
        test_groebnertools.py
        test_heuristicgcd.py
        test_hypothesis.py
        test injections.py
        test_modulargcd.py
        test_monomials.py
        test_multivariate_resultants.py
test orderings.py
        test_orthopolys.py
        test partfrac.py
```

```
test_polyclasses.py
        test polyfuncs.py
        test_polymatrix.py
        test polyoptions.py
        test_polyroots.py
        test polytools.py
        test_polyutils.py
        test pythonrational.py
        test_rationaltools.py
        test_rings.py
        test_ring_series.py
1
    1
        test_rootisolation.py
        test rootoftools.py
        test_solvers.py
        test specialpolys.py
        test_sqfreetools.py
        test_subresultants_qq_zz.py
        __init__.py
    \---_pycache_
            test appellseqs.cpython-311.pyc
            test_constructor.cpython-311.pyc
            test densearith.cpython-311.pyc
            test_densebasic.cpython-311.pyc
            test densetools.cpython-311.pyc
            test dispersion.cpython-311.pyc
            test_distributedmodules.cpython-311.pyc
            test euclidtools.cpython-311.pyc
            test_factortools.cpython-311.pyc
            test fields.cpython-311.pyc
            test_galoistools.cpython-311.pyc
            test groebnertools.cpython-311.pyc
            test_heuristicgcd.cpython-311.pyc
            test hypothesis.cpython-311.pyc
            test_injections.cpython-311.pyc
            test modulargcd.cpython-311.pyc
            test_monomials.cpython-311.pyc
            test multivariate resultants.cpython-311.pyc
            test_orderings.cpython-311.pyc
            test orthopolys.cpython-311.pyc
            test_partfrac.cpython-311.pyc
            test_polyclasses.cpython-311.pyc
            test_polyfuncs.cpython-311.pyc
            test_polymatrix.cpython-311.pyc
            test polyoptions.cpython-311.pyc
            test_polyroots.cpython-311.pyc
            test_polytools.cpython-311.pyc
            test_polyutils.cpython-311.pyc
            test pythonrational.cpython-311.pyc
            test_rationaltools.cpython-311.pyc
            test rings.cpython-311.pyc
```

```
test_ring_series.cpython-311.pyc
            test rootisolation.cpython-311.pyc
            test_rootoftools.cpython-311.pyc
            test solvers.cpython-311.pyc
            test_specialpolys.cpython-311.pyc
            test sqfreetools.cpython-311.pyc
            test_subresultants_qq_zz.cpython-311.pyc
            init .cpython-311.pyc
\---_pycache_
        appellseqs.cpython-311.pyc
        compatibility.cpython-311.pyc
        constructor.cpython-311.pyc
        densearith.cpython-311.pyc
        densebasic.cpython-311.pyc
        densetools.cpython-311.pyc
        dispersion.cpython-311.pyc
        distributedmodules.cpython-311.pyc
        domainmatrix.cpython-311.pyc
        euclidtools.cpython-311.pyc
        factortools.cpython-311.pyc
        fglmtools.cpython-311.pyc
        fields.cpython-311.pyc
        galoistools.cpython-311.pyc
        groebnertools.cpython-311.pyc
        heuristicgcd.cpython-311.pyc
        modulargcd.cpython-311.pyc
        monomials.cpython-311.pyc
        multivariate_resultants.cpython-311.pyc
        orderings.cpython-311.pyc
        orthopolys.cpython-311.pyc
        partfrac.cpython-311.pyc
        polyclasses.cpython-311.pyc
        polyconfig.cpython-311.pyc
        polyerrors.cpython-311.pyc
        polyfuncs.cpython-311.pyc
        polymatrix.cpython-311.pyc
        polyoptions.cpython-311.pyc
        polyquinticconst.cpython-311.pyc
        polyroots.cpython-311.pyc
        polytools.cpython-311.pyc
        polyutils.cpython-311.pyc
        rationaltools.cpython-311.pyc
        rings.cpython-311.pyc
        ring series.cpython-311.pyc
        rootisolation.cpython-311.pyc
        rootoftools.cpython-311.pyc
        solvers.cpython-311.pyc
        specialpolys.cpython-311.pyc
        sqfreetools.cpython-311.pyc
        subresultants qq zz.cpython-311.pyc
```

```
__init__.cpython-311.pyc
           +---printing
                  aesaracode.py
с.ру
                      codeprinter.py
                      conventions.py
                      cxx.py
                      defaults.py
                      dot.py
                   1
                       fortran.py
                      glsl.py
ī
                      gtk.py
                      jscode.py
                       julia.py
                      lambdarepr.py
Ī
                      latex.py
                      llvmjitcode.py
                      maple.py
1
ı
                      mathematica.py
                      mathml.py
|
                      numpy.py
                      octave.py
                      precedence.py
                      preview.py
                      printer.py
                      pycode.py
Ī
                      python.py
                       rcode.py
                   1
                      repr.py
                       rust.py
                       smtlib.py
ı
                      str.py
                      tableform.py
                      tensorflow.py
                       theanocode.py
1
                       tree.py
                       __init__.py
I
                   +---pretty
1
                     | pretty.py
                          pretty_symbology.py
                          stringpict.py
                          __init__.py
1
                     +---tests
Ī
                      | | test_pretty.py
                      __init__.py
                  - 1
                     | \---__pycache__
                                  test_pretty.cpython-311.pyc
```

```
__init__.cpython-311.pyc
                       \---__pycache__
                               pretty.cpython-311.pyc
                               pretty_symbology.cpython-311.pyc
                               stringpict.cpython-311.pyc
                               __init__.cpython-311.pyc
                   +---tests
                           test_aesaracode.py
                      test_c.py
                   test_codeprinter.py
                           test conventions.py
                           test_cupy.py
                           test cxx.py
                           test_dot.py
                           test_fortran.py
ı
                           test_glsl.py
                           test_gtk.py
                   test_jax.py
                           test jscode.py
                           test_julia.py
                       test lambdarepr.py
                           test_latex.py
                           test llvmjit.py
                           test_maple.py
                           test_mathematica.py
                           test mathml.py
ı
                           test_numpy.py
                   1
                       1
                           test octave.py
                           test_precedence.py
                           test_preview.py
                       test_pycode.py
                           test_python.py
                           test_rcode.py
                           test_repr.py
                           test_rust.py
                           test smtlib.py
                           test_str.py
                           test tableform.py
                           test_tensorflow.py
                           test_theanocode.py
                           test_tree.py
                           __init__.py
                      \---__pycache__
ı
                               test_aesaracode.cpython-311.pyc
                               test_c.cpython-311.pyc
                               test_codeprinter.cpython-311.pyc
                               test_conventions.cpython-311.pyc
                               test cupy.cpython-311.pyc
```

```
test_cxx.cpython-311.pyc
            test dot.cpython-311.pyc
            test_fortran.cpython-311.pyc
            test glsl.cpython-311.pyc
            test_gtk.cpython-311.pyc
            test jax.cpython-311.pyc
            test_jscode.cpython-311.pyc
            test julia.cpython-311.pyc
            test lambdarepr.cpython-311.pyc
            test_latex.cpython-311.pyc
            test llvmjit.cpython-311.pyc
            test_maple.cpython-311.pyc
            test mathematica.cpython-311.pyc
            test_mathml.cpython-311.pyc
            test_numpy.cpython-311.pyc
            test_octave.cpython-311.pyc
            test_precedence.cpython-311.pyc
            test_preview.cpython-311.pyc
            test pycode.cpython-311.pyc
            test_python.cpython-311.pyc
            test rcode.cpython-311.pyc
            test_repr.cpython-311.pyc
            test rust.cpython-311.pyc
            test_smtlib.cpython-311.pyc
            test str.cpython-311.pyc
            test tableform.cpython-311.pyc
            test_tensorflow.cpython-311.pyc
            test theanocode.cpython-311.pyc
            test_tree.cpython-311.pyc
            init .cpython-311.pyc
\--- pycache
       aesaracode.cpython-311.pyc
       c.cpython-311.pyc
       codeprinter.cpython-311.pyc
       conventions.cpython-311.pyc
       cxx.cpython-311.pyc
       defaults.cpython-311.pyc
       dot.cpython-311.pyc
        fortran.cpython-311.pyc
       glsl.cpython-311.pyc
       gtk.cpython-311.pyc
       jscode.cpython-311.pyc
       julia.cpython-311.pyc
       lambdarepr.cpython-311.pyc
       latex.cpython-311.pyc
       llvmjitcode.cpython-311.pyc
       maple.cpython-311.pyc
       mathematica.cpython-311.pyc
       mathml.cpython-311.pyc
       numpy.cpython-311.pyc
```

```
octave.cpython-311.pyc
               precedence.cpython-311.pyc
               preview.cpython-311.pyc
               printer.cpython-311.pyc
               pycode.cpython-311.pyc
               python.cpython-311.pyc
               rcode.cpython-311.pyc
               repr.cpython-311.pyc
               rust.cpython-311.pyc
               smtlib.cpython-311.pyc
               str.cpython-311.pyc
               tableform.cpython-311.pyc
               tensorflow.cpython-311.pyc
               theanocode.cpython-311.pyc
               tree.cpython-311.pyc
               __init__.cpython-311.pyc
   +---sandbox
      | indexed integrals.py
       | __init__.py
       +---tests
       | | test indexed integrals.py
       \---_pycache__
                   test_indexed_integrals.cpython-311.pyc
                   __init__.cpython-311.pyc
      \---__pycache__
               indexed_integrals.cpython-311.pyc
               __init__.cpython-311.pyc
   +---series
   1 1
           acceleration.py
           approximants.py
           aseries.py
           formal.py
           fourier.py
           gruntz.py
           kauers.py
           limits.py
           limitseq.py
           order.py
           residues.py
           sequences.py
           series.py
           series_class.py
           __init__.py
+---benchmarks
```

```
bench_limit.py
       bench_order.py
        __init__.py
   \---_pycache_
            bench limit.cpython-311.pyc
           bench_order.cpython-311.pyc
            init .cpython-311.pyc
+---tests
       test_approximants.py
   -
        test_aseries.py
        test demidovich.py
        test_formal.py
        test fourier.py
        test_gruntz.py
        test_kauers.py
        test_limits.py
        test_limitseq.py
        test_lseries.py
        test nseries.py
        test_order.py
        test residues.py
        test_sequences.py
        test series.py
        __init__.py
1
   \---_pycache_
            {\tt test\_approximants.cpython-311.pyc}
            test aseries.cpython-311.pyc
            test_demidovich.cpython-311.pyc
            test_formal.cpython-311.pyc
            test_fourier.cpython-311.pyc
            test gruntz.cpython-311.pyc
            test_kauers.cpython-311.pyc
            test limits.cpython-311.pyc
            test_limitseq.cpython-311.pyc
            test lseries.cpython-311.pyc
            test_nseries.cpython-311.pyc
            test order.cpython-311.pyc
            test_residues.cpython-311.pyc
            test_sequences.cpython-311.pyc
            test_series.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        acceleration.cpython-311.pyc
        approximants.cpython-311.pyc
        aseries.cpython-311.pyc
        formal.cpython-311.pyc
        fourier.cpython-311.pyc
```

```
gruntz.cpython-311.pyc
            kauers.cpython-311.pyc
           limits.cpython-311.pyc
            limitseq.cpython-311.pyc
           order.cpython-311.pyc
            residues.cpython-311.pyc
            sequences.cpython-311.pyc
            series.cpython-311.pyc
            series_class.cpython-311.pyc
            __init__.cpython-311.pyc
+---sets
       conditionset.py
   1
       contains.py
       fancysets.py
       ordinals.py
       powerset.py
       setexpr.py
       sets.py
        __init__.py
   +---handlers
           comparison.py
            functions.py
           intersection.py
           issubset.py
           mul.py
           power.py
           union.py
            __init__.py
       \---__pycache__
                add.cpython-311.pyc
                comparison.cpython-311.pyc
                functions.cpython-311.pyc
                intersection.cpython-311.pyc
                issubset.cpython-311.pyc
                mul.cpython-311.pyc
                power.cpython-311.pyc
                union.cpython-311.pyc
                __init__.cpython-311.pyc
   +---tests
       - 1
           test conditionset.py
           test_contains.py
           test_fancysets.py
           test_ordinals.py
   1
       test_powerset.py
           test_setexpr.py
           test sets.py
```

```
| __init__.py
       \---__pycache__
                test conditionset.cpython-311.pyc
                test_contains.cpython-311.pyc
               test fancysets.cpython-311.pyc
               test_ordinals.cpython-311.pyc
                test powerset.cpython-311.pyc
               test_setexpr.cpython-311.pyc
               test_sets.cpython-311.pyc
                __init__.cpython-311.pyc
    \--- pycache
           conditionset.cpython-311.pyc
           contains.cpython-311.pyc
            fancysets.cpython-311.pyc
           ordinals.cpython-311.pyc
           powerset.cpython-311.pyc
           setexpr.cpython-311.pyc
           sets.cpython-311.pyc
            __init__.cpython-311.pyc
+---simplify
       combsimp.py
       cse main.py
       cse_opts.py
       epathtools.py
       fu.py
       gammasimp.py
       hyperexpand.py
       hyperexpand_doc.py
       powsimp.py
       radsimp.py
        ratsimp.py
       simplify.py
       sqrtdenest.py
       traversaltools.py
       trigsimp.py
        __init__.py
   +---tests
           test_combsimp.py
           test_cse.py
           test_epathtools.py
           test fu.py
           test_function.py
           test_gammasimp.py
           test_hyperexpand.py
           test_powsimp.py
   test_radsimp.py
           test ratsimp.py
```

```
test_rewrite.py
            test_simplify.py
           test_sqrtdenest.py
            test trigsimp.py
            __init__.py
       \---__pycache__
                test combsimp.cpython-311.pyc
                test_cse.cpython-311.pyc
                test_epathtools.cpython-311.pyc
                test fu.cpython-311.pyc
                test_function.cpython-311.pyc
                test_gammasimp.cpython-311.pyc
                test_hyperexpand.cpython-311.pyc
                test powsimp.cpython-311.pyc
                test_radsimp.cpython-311.pyc
                test_ratsimp.cpython-311.pyc
                test_rewrite.cpython-311.pyc
                test simplify.cpython-311.pyc
                test_sqrtdenest.cpython-311.pyc
                test trigsimp.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache_
            combsimp.cpython-311.pyc
            cse_main.cpython-311.pyc
            cse_opts.cpython-311.pyc
            epathtools.cpython-311.pyc
            fu.cpython-311.pyc
            gammasimp.cpython-311.pyc
           hyperexpand.cpython-311.pyc
            hyperexpand doc.cpython-311.pyc
            powsimp.cpython-311.pyc
            radsimp.cpython-311.pyc
            ratsimp.cpython-311.pyc
            simplify.cpython-311.pyc
            sqrtdenest.cpython-311.pyc
            traversaltools.cpython-311.pyc
            trigsimp.cpython-311.pyc
            init .cpython-311.pyc
+---solvers
       bivariate.py
       decompogen.py
       deutils.py
       inequalities.py
       pde.py
       polysys.py
        recurr.py
        simplex.py
        solvers.py
```

```
1
      | | solveset.py
       1 1 1
           +---benchmarks
1 1
       | | | bench_solvers.py
1
           1
            1 1
            | \---__pycache__
                   bench_solvers.cpython-311.pyc
                    __init__.cpython-311.pyc
         - 1
            - 1
           +---diophantine
       | | | diophantine.py
            1 1
1
       | | test_diophantine.py
Ī
           | | | __init__.py
           1
                      test diophantine.cpython-311.pyc
                       __init__.cpython-311.pyc
1
         diophantine.cpython-311.pyc
                    __init__.cpython-311.pyc
           | +---ode
         | | hypergeometric.py
           | | lie group.py
            | | nonhomogeneous.py
           | | ode.py
           | | riccati.py
            | | single.py
           | | subscheck.py
              | systems.py
1
                 __init__.py
              - 1
           | +---tests
1
            | | test lie group.py
           | | test_ode.py
Τ
                | test_riccati.py
            | | test_single.py
              | | test_subscheck.py
              | | test systems.py
           Ī
            1 1 1
           test_lie_group.cpython-311.pyc
       test_ode.cpython-311.pyc
                      test riccati.cpython-311.pyc
```

```
{\tt test\_single.cpython-311.pyc}
                test subscheck.cpython-311.pyc
                test_systems.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache_
            hypergeometric.cpython-311.pyc
            lie group.cpython-311.pyc
            nonhomogeneous.cpython-311.pyc
            ode.cpython-311.pyc
            riccati.cpython-311.pyc
            single.cpython-311.pyc
            subscheck.cpython-311.pyc
            systems.cpython-311.pyc
            init .cpython-311.pyc
+---tests
        test_constantsimp.py
        test_decompogen.py
        test_inequalities.py
        test numeric.py
        test_pde.py
        test polysys.py
        test_recurr.py
        test simplex.py
        test_solvers.py
        test_solveset.py
        init .py
   \--- pycache
            test_constantsimp.cpython-311.pyc
            test_decompogen.cpython-311.pyc
            test_inequalities.cpython-311.pyc
            test_numeric.cpython-311.pyc
            test_pde.cpython-311.pyc
            test polysys.cpython-311.pyc
            test_recurr.cpython-311.pyc
            test simplex.cpython-311.pyc
            test_solvers.cpython-311.pyc
            test solveset.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
       bivariate.cpython-311.pyc
        decompogen.cpython-311.pyc
        deutils.cpython-311.pyc
        inequalities.cpython-311.pyc
        pde.cpython-311.pyc
        polysys.cpython-311.pyc
        recurr.cpython-311.pyc
        simplex.cpython-311.pyc
```

```
solvers.cpython-311.pyc
               solveset.cpython-311.pyc
               __init__.cpython-311.pyc
   +---stats
      compound rv.py
           crv.py
           crv types.py
           drv.py
           drv_types.py
           error prop.py
           frv.py
           frv types.py
           joint_rv.py
           joint rv types.py
           matrix_distributions.py
           random matrix.py
           random_matrix_models.py
           rv.py
           rv_interface.py
           stochastic process.py
           stochastic_process_types.py
           symbolic multivariate probability.py
           symbolic_probability.py
           init .py
       +---sampling
       | | sample numpy.py
             sample_pymc.py
              sample scipy.py
           1
              __init__.py
       | +---tests
          | test_sample_continuous_rv.py
          | test_sample_discrete_rv.py
                 test_sample_finite_rv.py
                  __init__.py
          | \---__pycache__
                      test sample continuous rv.cpython-311.pyc
                      test_sample_discrete_rv.cpython-311.pyc
                      test_sample_finite_rv.cpython-311.pyc
                       __init__.cpython-311.pyc
           \--- pycache
                   sample_numpy.cpython-311.pyc
                  sample_pymc.cpython-311.pyc
                  sample_scipy.cpython-311.pyc
                   __init__.cpython-311.pyc
+---tests
```

```
test_compound_rv.py
       test continuous rv.py
       test_discrete_rv.py
       test error prop.py
       test_finite_rv.py
       test joint rv.py
       test_matrix_distributions.py
       test mix.py
       test random matrix.py
       test_rv.py
       test stochastic process.py
       test_symbolic_multivariate.py
       test symbolic probability.py
       __init__.py
   \---_pycache_
           test compound rv.cpython-311.pyc
           test_continuous_rv.cpython-311.pyc
           test discrete rv.cpython-311.pyc
           test_error_prop.cpython-311.pyc
           test finite rv.cpython-311.pyc
           test_joint_rv.cpython-311.pyc
           test matrix distributions.cpython-311.pyc
           test_mix.cpython-311.pyc
           test random matrix.cpython-311.pyc
           test rv.cpython-311.pyc
           test_stochastic_process.cpython-311.pyc
           test symbolic multivariate.cpython-311.pyc
           test_symbolic_probability.cpython-311.pyc
            init .cpython-311.pyc
\--- pycache
       compound_rv.cpython-311.pyc
       crv.cpython-311.pyc
       crv_types.cpython-311.pyc
       drv.cpython-311.pyc
       drv_types.cpython-311.pyc
       error prop.cpython-311.pyc
       frv.cpython-311.pyc
        frv types.cpython-311.pyc
       joint_rv.cpython-311.pyc
       joint_rv_types.cpython-311.pyc
       matrix_distributions.cpython-311.pyc
       random_matrix.cpython-311.pyc
       random matrix models.cpython-311.pyc
       rv.cpython-311.pyc
       rv interface.cpython-311.pyc
       stochastic_process.cpython-311.pyc
       stochastic process types.cpython-311.pyc
       symbolic_multivariate_probability.cpython-311.pyc
       symbolic probability.cpython-311.pyc
```

```
__init__.cpython-311.pyc
         1 1
         | +---strategies
         | | core.py
tools.py
                  traverse.py
                  tree.py
                  util.py
                   __init__.py
               - 1
               +---branch
            | | core.py
                | | tools.py
                  | traverse.py
                   | __init__.py
Ī
               | +---tests
               | | test core.py
                  | | test_tools.py
                  | | test traverse.py
               1
                test_core.cpython-311.pyc
                            test_tools.cpython-311.pyc
                             test_traverse.cpython-311.pyc
                             __init__.cpython-311.pyc
1
               | \---__pycache__
                         core.cpython-311.pyc
                         tools.cpython-311.pyc
                         traverse.cpython-311.pyc
                          __init__.cpython-311.pyc
               +---tests
               | | test_core.py
               | | test rl.py
                  | test_tools.py
                  | test traverse.py
               | | test_tree.py
__init__.py
               | |
                  \---__pycache__
                         test core.cpython-311.pyc
                          test_rl.cpython-311.pyc
Ī
                         test_tools.cpython-311.pyc
                          test_traverse.cpython-311.pyc
                         test tree.cpython-311.pyc
                          __init__.cpython-311.pyc
         | |
```

```
\---_pycache_
                          core.cpython-311.pyc
                          rl.cpython-311.pyc
                          tools.cpython-311.pyc
                          traverse.cpython-311.pyc
                          tree.cpython-311.pyc
                          util.cpython-311.pyc
                           init .cpython-311.pyc
               +---tensor
                  - 1
                      functions.py
                      indexed.py
                      index methods.py
                       tensor.py
                      toperators.py
                       __init__.py
                  +---array
                   1 1
                         arrayop.py
                          array_comprehension.py
                          array_derivatives.py
                          dense_ndim_array.py
                          mutable_ndim_array.py
                          ndim_array.py
                          sparse ndim array.py
                          __init__.py
                   +---expressions
                              arrayexpr_derivatives.py
                          - 1
                              array expressions.py
                              conv_array_to_indexed.py
                              conv_array_to_matrix.py
                              conv_indexed_to_array.py
                              conv_matrix_to_array.py
                              from_array_to_indexed.py
                              from_array_to_matrix.py
                              from_indexed_to_array.py
                              from matrix to array.py
                              utils.py
                      +---tests
                         1 1
                                  test_arrayexpr_derivatives.py
                                  test_array_expressions.py
                                  test as explicit.py
                                  test_convert_array_to_indexed.py
ı
                                  test_convert_array_to_matrix.py
                                  test_convert_indexed_to_array.py
                                  test_convert_matrix_to_array.py
                                  test_deprecated_conv_modules.py
                                  __init__.py
```

```
\--- pycache
                test_arrayexpr_derivatives.cpython-311.pyc
                test array expressions.cpython-311.pyc
                test_as_explicit.cpython-311.pyc
                test convert array to indexed.cpython-311.pyc
                test_convert_array_to_matrix.cpython-311.pyc
                test convert indexed to array.cpython-311.pyc
                test_convert_matrix_to_array.cpython-311.pyc
                test_deprecated_conv_modules.cpython-311.pyc
                init .cpython-311.pyc
    \--- pycache
            arrayexpr_derivatives.cpython-311.pyc
            array expressions.cpython-311.pyc
            conv_array_to_indexed.cpython-311.pyc
            conv_array_to_matrix.cpython-311.pyc
            conv_indexed_to_array.cpython-311.pyc
            conv_matrix_to_array.cpython-311.pyc
            from_array_to_indexed.cpython-311.pyc
            from array to matrix.cpython-311.pyc
            from_indexed_to_array.cpython-311.pyc
            from matrix to array.cpython-311.pyc
            utils.cpython-311.pyc
            init .cpython-311.pyc
+---tests
        test arrayop.py
        {\tt test\_array\_comprehension.py}
        test array derivatives.py
        test_immutable_ndim_array.py
        test_mutable_ndim_array.py
        test_ndim_array.py
        test ndim array conversions.py
        __init__.py
   \---__pycache__
            test arrayop.cpython-311.pyc
            {\tt test\_array\_comprehension.cpython-311.pyc}
            test array derivatives.cpython-311.pyc
            test_immutable_ndim_array.cpython-311.pyc
            test_mutable_ndim_array.cpython-311.pyc
            test_ndim_array.cpython-311.pyc
            test_ndim_array_conversions.cpython-311.pyc
            init .cpython-311.pyc
\---_pycache_
        arrayop.cpython-311.pyc
        array comprehension.cpython-311.pyc
        array_derivatives.cpython-311.pyc
        dense ndim array.cpython-311.pyc
```

```
mutable_ndim_array.cpython-311.pyc
                   ndim_array.cpython-311.pyc
                   sparse_ndim_array.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---tests
               test_functions.py
       test indexed.py
               test_index_methods.py
               test_printing.py
               test tensor.py
           test_tensor_element.py
               test tensor operators.py
               __init__.py
           \---__pycache__
                   test_functions.cpython-311.pyc
                   test_indexed.cpython-311.pyc
                   test index methods.cpython-311.pyc
                   test_printing.cpython-311.pyc
                   test tensor.cpython-311.pyc
                   test_tensor_element.cpython-311.pyc
                   test tensor operators.cpython-311.pyc
                   __init__.cpython-311.pyc
       \---_pycache_
               functions.cpython-311.pyc
               indexed.cpython-311.pyc
               index_methods.cpython-311.pyc
               tensor.cpython-311.pyc
               toperators.cpython-311.pyc
               __init__.cpython-311.pyc
   +---testing
      matrices.py
           pytest.py
           quality_unicode.py
           randtest.py
           runtests.py
           runtests pytest.py
           tmpfiles.py
           __init__.py
       +---tests
          - 1
              diagnose imports.py
          test_code_quality.py
               test_deprecated.py
               test_module_imports.py
       test pytest.py
              test_runtests_pytest.py
init .py
```

```
\---__pycache__
                diagnose_imports.cpython-311.pyc
                test_code_quality.cpython-311.pyc
                test_deprecated.cpython-311.pyc
                test module imports.cpython-311.pyc
                test_pytest.cpython-311.pyc
                test runtests pytest.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            matrices.cpython-311.pyc
            pytest.cpython-311.pyc
            quality_unicode.cpython-311.pyc
            randtest.cpython-311.pyc
            runtests.cpython-311.pyc
            runtests_pytest.cpython-311.pyc
            tmpfiles.cpython-311.pyc
            __init__.cpython-311.pyc
+---unify
       core.py
        rewrite.py
        usympy.py
        init .py
    +---tests
    | | test rewrite.py
            test_sympy.py
            test unify.py
            __init__.py
       \---__pycache__
               test rewrite.cpython-311.pyc
                test_sympy.cpython-311.pyc
               test unify.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            core.cpython-311.pyc
            rewrite.cpython-311.pyc
            usympy.cpython-311.pyc
            __init__.cpython-311.pyc
+---utilities
  autowrap.py
        codegen.py
        decorator.py
       enumerative.py
       exceptions.py
        iterables.py
```

```
| | lambdify.py
                   magic.py
            matchpy_connector.py
                   memoization.py
1
                   misc.py
                   pkgdata.py
1
                   pytest.py
                   randtest.py
                   runtests.py
                   source.py
                1
                   timeutils.py
1
                   tmpfiles.py
Ī
                   __init__.py
         1
            +---mathml
1
               1
                  Ī
               | +---data
1
                | | mmlctop.xsl
| | mmltex.xsl
1
                  | | simple mmlctop.xsl
1
               |
1
Ī
                             init .cpython-311.pyc
Τ
                | \---_pycache__
                         __init__.cpython-311.pyc
Ī
               +---tests
1
               | test_autowrap.py
                | test_codegen.py
Ī
1
                  test_codegen_julia.py
1
                      test_codegen_octave.py
1
                test_codegen_rust.py
                      test decorator.py
1
                      test_deprecated.py
1
                      test enumerative.py
1
                      test_exceptions.py
                      test iterables.py
                      test_lambdify.py
               1
                  - 1
                      test_matchpy_connector.py
               1 1
                      test_mathml.py
I
                      test_misc.py
                      test pickling.py
1
                1
               1 1
                      test_source.py
Ī
                  test_timeutils.py
               1 1
                      test_wester.py
1
Ī
               1 1
                      test xxe.py
                      __init__.py
               1 1
```

```
\---_pycache_
            test autowrap.cpython-311.pyc
            test_codegen.cpython-311.pyc
            test codegen julia.cpython-311.pyc
            test_codegen_octave.cpython-311.pyc
            test codegen rust.cpython-311.pyc
            test_decorator.cpython-311.pyc
            test deprecated.cpython-311.pyc
            test_enumerative.cpython-311.pyc
            test_exceptions.cpython-311.pyc
            test iterables.cpython-311.pyc
            test_lambdify.cpython-311.pyc
            test_matchpy_connector.cpython-311.pyc
            test_mathml.cpython-311.pyc
            test misc.cpython-311.pyc
            test_pickling.cpython-311.pyc
            test_source.cpython-311.pyc
            test_timeutils.cpython-311.pyc
            test wester.cpython-311.pyc
            test_xxe.cpython-311.pyc
            init .cpython-311.pyc
+--- compilation
       availability.py
       compilation.py
       runners.py
       util.py
       init .py
   +---tests
  | test_compilation.py
       | __init__.py
   \---__pycache__
               test_compilation.cpython-311.pyc
               init .cpython-311.pyc
    \--- pycache
           availability.cpython-311.pyc
           compilation.cpython-311.pyc
           runners.cpython-311.pyc
           util.cpython-311.pyc
            __init__.cpython-311.pyc
\--- pycache
        autowrap.cpython-311.pyc
       codegen.cpython-311.pyc
       decorator.cpython-311.pyc
       enumerative.cpython-311.pyc
       exceptions.cpython-311.pyc
        iterables.cpython-311.pyc
```

```
lambdify.cpython-311.pyc
           magic.cpython-311.pyc
           matchpy_connector.cpython-311.pyc
           memoization.cpython-311.pyc
           misc.cpython-311.pyc
           pkgdata.cpython-311.pyc
           pytest.cpython-311.pyc
           randtest.cpython-311.pyc
           runtests.cpython-311.pyc
           source.cpython-311.pyc
           timeutils.cpython-311.pyc
           tmpfiles.cpython-311.pyc
           init .cpython-311.pyc
+---vector
       basisdependent.py
       coordsysrect.py
       deloperator.py
       dyadic.py
        functions.py
        implicitregion.py
       integrals.py
       operators.py
       orienters.py
       parametricregion.py
       point.py
        scalar.py
       vector.py
        __init__.py
   1
   +---tests
           test_coordsysrect.py
           test_dyadic.py
           test field functions.py
           test_functions.py
           test implicitregion.py
           test_integrals.py
           test operators.py
           test_parametricregion.py
           test printing.py
           test_vector.py
           __init__.py
   -
       \---__pycache__
               test coordsysrect.cpython-311.pyc
                test_dyadic.cpython-311.pyc
                test_field_functions.cpython-311.pyc
                test_functions.cpython-311.pyc
                test implicitregion.cpython-311.pyc
                test_integrals.cpython-311.pyc
                test operators.cpython-311.pyc
```

```
test_parametricregion.cpython-311.pyc
                    test_printing.cpython-311.pyc
                    test_vector.cpython-311.pyc
                    __init__.cpython-311.pyc
        \---_pycache_
               basisdependent.cpython-311.pyc
                coordsysrect.cpython-311.pyc
               deloperator.cpython-311.pyc
                dyadic.cpython-311.pyc
                functions.cpython-311.pyc
                implicitregion.cpython-311.pyc
                integrals.cpython-311.pyc
               operators.cpython-311.pyc
               orienters.cpython-311.pyc
               parametricregion.cpython-311.pyc
               point.cpython-311.pyc
               scalar.cpython-311.pyc
                vector.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            abc.cpython-311.pyc
            conftest.cpython-311.pyc
            galgebra.cpython-311.pyc
            release.cpython-311.pyc
            this.cpython-311.pyc
            init .cpython-311.pyc
+---sympy-1.13.1.dist-info
       AUTHORS
       entry_points.txt
        INSTALLER
        LICENSE
       METADATA
        RECORD
        top_level.txt
        WHEEL
+---tests
       conftest.py
        test_cli.py
       test_cuda.py
        test_engine.py
       test exports.py
       test_integrations.py
       test_python.py
        test_solutions.py
__init__.py
  \--- pycache
```

```
conftest.cpython-311.pyc
           test_cli.cpython-311.pyc
           test_cuda.cpython-311.pyc
           test engine.cpython-311.pyc
           test_exports.cpython-311.pyc
           test integrations.cpython-311.pyc
           test_python.cpython-311.pyc
           test solutions.cpython-311.pyc
            __init__.cpython-311.pyc
+---thop
       fx_profile.py
       profile.py
       rnn_hooks.py
       utils.py
        __init__.py
   +---vision
          basic hooks.py
          calc_func.py
           __init__.py
       \---_pycache__
               basic_hooks.cpython-311.pyc
               calc func.cpython-311.pyc
               __init__.cpython-311.pyc
    \---_pycache__
           fx_profile.cpython-311.pyc
           profile.cpython-311.pyc
           rnn_hooks.cpython-311.pyc
           utils.cpython-311.pyc
           __init__.cpython-311.pyc
+---torch
       functional.py
       hub.py
       library.py
       overrides.py
       py.typed
       quasirandom.py
        random.py
       return_types.py
       return_types.pyi
       serialization.py
       storage.py
       torch_version.py
       types.py
version.py
       _appdirs.py
1 1
       C.cp311-win amd64.pyd
```

```
_classes.py
           _compile.py
                  _custom_ops.py
_deploy.py
                  _environment.py
           _guards.py
                  _jit_internal.py
                  _linalg_utils.py
           _lobpcg.py
                  _lowrank.py
                  _meta_registrations.py
                  _namedtensor_internals.py
           _ops.py
                  \verb|_python_dispatcher.py|
                  _size_docs.py
           _sources.py
                  _storage_docs.py
                  _streambase.py
           _tensor.py
                  _tensor_docs.py
                  _tensor_str.py
                  _thread_safe_fork.py
                  _torch_docs.py
                  _utils.py
                  _utils_internal.py
                  _VF.py
           _VF.pyi
                  _vmap_internals.py
                  _weights_only_unpickler.py
                  __config__.py
           __future__.py
                  __init__.py
           +---accelerator
              | utils.py
                  | __init__.py
                  \---__pycache__
                         _utils.cpython-311.pyc
                          __init__.cpython-311.pyc
              +---amp
              | autocast_mode.py
                      grad_scaler.py
                      __init__.py
                 Ī
                 \---_pycache__
                          autocast_mode.cpython-311.pyc
                          grad_scaler.cpython-311.pyc
           __init__.cpython-311.pyc
```

```
- 1
  | +---ao
   1 1 1
    | | +---nn
| +---intrinsic
       | +---modules
       | | | fused.py
        fused.cpython-311.pyc
               __init__.cpython-311.pyc
       1 1 1
       | | +---qat
       | | | | conv_fused.py
           | | linear fused.py
        | | | linear_relu.py
             | init .py
        conv_fused.cpython-311.pyc
                linear_fused.cpython-311.pyc
       linear relu.cpython-311.pyc
                __init__.cpython-311.pyc
       __init__.cpython-311.pyc
       | | +---quantized
       | +---dynamic
        | +---modules
         | | | | linear_relu.py
         linear_relu.cpython-311.pyc
                  __init__.cpython-311.pyc
       __init__.cpython-311.pyc
```

```
| conv_add.py
| linear relu.py
                  | __init__.py
           \---_pycache__
                     bn_relu.cpython-311.pyc
                      conv add.cpython-311.pyc
                      conv_relu.cpython-311.pyc
                      linear relu.cpython-311.pyc
                      __init__.cpython-311.pyc
           1
          __init__.cpython-311.pyc
I
         | \---_pycache__
__init__.cpython-311.pyc
1
      | | +---qat
1
         1 1 1
          | +---dynamic
           | +---modules
           | | | linear.py
           linear.cpython-311.pyc
                      __init__.cpython-311.pyc
__init__.cpython-311.pyc
1
1
         | +---modules
           | | conv.py
           | | embedding_ops.py
Τ
               | linear.py
           | | \--- pycache
                    conv.cpython-311.pyc
I
                    embedding_ops.cpython-311.pyc
                   linear.cpython-311.pyc
                    __init__.cpython-311.pyc
      1 1
         1 1 1
```

```
1 1 1 1
                  __init__.cpython-311.pyc
      | | +---quantizable
         1
          | +---modules
| | activation.py
            | | | rnn.py
            1
          activation.cpython-311.pyc
1
                    rnn.cpython-311.pyc
                     __init__.cpython-311.pyc
1
            1
               __init__.cpython-311.pyc
| +---quantized
| | functional.py
1
          1 1 1
1
| +---dynamic
          | +---modules
            | | | linear.py
1
              | | | rnn.py
                  | __init__.py
            conv.cpython-311.pyc
1
                       linear.cpython-311.pyc
                      rnn.cpython-311.pyc
                       __init__.cpython-311.pyc
1
                     __init__.cpython-311.pyc
          | +---modules
Τ
              | | activation.py
            | | batchnorm.py
            | | conv.py
              | dropout.py
            | | embedding_ops.py
1
            | | functional_modules.py
            | | | linear.py
          | | | normalization.py
1
         | | | rnn.py
```

```
activation.cpython-311.pyc
                            batchnorm.cpython-311.pyc
                            conv.cpython-311.pyc
                            dropout.cpython-311.pyc
                            embedding ops.cpython-311.pyc
                            functional_modules.cpython-311.pyc
                            linear.cpython-311.pyc
                            normalization.cpython-311.pyc
                            rnn.cpython-311.pyc
                            utils.cpython-311.pyc
                            __init__.cpython-311.pyc
               | +---reference
                | +---modules
                  | | conv.py
                        | linear.py
1
                        | rnn.py
                            sparse.py
                        utils.py
                            init .py
                         \---_pycache_
                               conv.cpython-311.pyc
                               linear.cpython-311.pyc
                               rnn.cpython-311.pyc
                               sparse.cpython-311.pyc
                               utils.cpython-311.pyc
                               __init__.cpython-311.pyc
                  __init__.cpython-311.pyc
                  \---__pycache__
                        functional.cpython-311.pyc
                         init .cpython-311.pyc
                +---sparse
               | |
                  +---quantized
               | | | linear.py
Ī
                  | | utils.py
                         __init__.py
                | +---dynamic
```

```
\---_pycache__
                            linear.cpython-311.pyc
                            __init__.cpython-311.pyc
                \---__pycache__
                        linear.cpython-311.pyc
                        utils.cpython-311.pyc
                         __init__.cpython-311.pyc
            \---__pycache__
                     __init__.cpython-311.pyc
         \--- pycache
                  __init__.cpython-311.pyc
      +---ns
             _numeric_suite.py
      1 1
         | _numeric_suite_fx.py
         | __init__.py
      | | graph_matcher.py
                 graph passes.py
                 mappings.py
                 ns_types.py
                n shadows utils.py
                 pattern_utils.py
                 qconfig multi mapping.py
              - 1
                 utils.py
                 weight utils.py
         __init__.py
            \---_pycache_
                     graph matcher.cpython-311.pyc
                     graph_passes.cpython-311.pyc
                     mappings.cpython-311.pyc
                     ns_types.cpython-311.pyc
                     n shadows utils.cpython-311.pyc
                     pattern_utils.cpython-311.pyc
                     qconfig_multi_mapping.cpython-311.pyc
                     utils.cpython-311.pyc
                     weight_utils.cpython-311.pyc
                     __init__.cpython-311.pyc
         \---__pycache__
                 _numeric_suite.cpython-311.pyc
                 _numeric_suite_fx.cpython-311.pyc
                  __init__.cpython-311.pyc
| |
```

```
| | +---pruning
 | | | mappings.py
 | | +---scheduler
     | | base scheduler.py
     | | cubic_scheduler.py
     | | lambda scheduler.py
     base_scheduler.cpython-311.pyc
               cubic scheduler.cpython-311.pyc
               lambda_scheduler.cpython-311.pyc
               __init__.cpython-311.pyc
     | +---sparsifier
   | | | base_sparsifier.py
     | | nearly_diagonal_sparsifier.py
     | | utils.py
     | | | weight norm sparsifier.py
  base sparsifier.cpython-311.pyc
               nearly diagonal sparsifier.cpython-311.pyc
               utils.cpython-311.pyc
               weight norm sparsifier.cpython-311.pyc
               __init__.cpython-311.pyc
     | +---_experimental
  | | +---activation sparsifier
     | | | activation_sparsifier.py
     activation_sparsifier.cpython-311.pyc
                  init .cpython-311.pyc
     | +---data_scheduler
     | | | base_data_scheduler.py
     base_data_scheduler.cpython-311.pyc
                  __init__.cpython-311.pyc
 | | | +---data_sparsifier
| | | | | base data sparsifier.py
```

```
| | | data_norm_sparsifier.py
| | | quantization utils.py
__init__.py
   | | +---lightning
      +---callbacks
             | | data_sparsity.py
                     _data_sparstity_utils.py
                     __init__.py
             - 1
                  \--- pycache
                        data_sparsity.cpython-311.pyc
                        data sparstity utils.cpython-311.pyc
                         __init__.cpython-311.pyc
      __init__.cpython-311.pyc
   base_data_sparsifier.cpython-311.pyc
                  data norm sparsifier.cpython-311.pyc
                  quantization_utils.cpython-311.pyc
                  init .cpython-311.pyc
   | +---pruner
    | | base structured sparsifier.py
       | | FPGM_pruner.py
             lstm saliency pruner.py
           | match_utils.py
           | parametrization.py
          | prune_functions.py
              saliency pruner.py
   __init__.py
          \---__pycache__
                  base structured sparsifier.cpython-311.pyc
                  FPGM_pruner.cpython-311.pyc
                  1stm saliency pruner.cpython-311.pyc
                 match_utils.cpython-311.pyc
                  parametrization.cpython-311.pyc
                 prune_functions.cpython-311.pyc
                  saliency_pruner.cpython-311.pyc
                  __init__.cpython-311.pyc
   | \---_pycache__
              __init__.cpython-311.pyc
1 1
| \---__pycache__
           mappings.cpython-311.pyc
```

```
__init__.cpython-311.pyc
+---quantization
       fake_quantize.py
       fuser_method_mappings.py
        fuse modules.py
       observer.py
       qconfig.py
       qconfig_mapping.py
       quantization_mappings.py
       quantize.py
       quantize_fx.py
       quantize jit.py
       quantize_pt2e.py
       quant type.py
       stubs.py
       utils.py
        _correct_bias.py
       equalize.py
       _learnable_fake_quantize.py
       init .py
    +---backend config
           backend_config.py
            executorch.py
            fbgemm.py
            native.py
            observation type.py
            onednn.py
   1
            qnnpack.py
            tensorrt.py
            utils.py
            х86.ру
            _common_operator_config_utils.py
           _qnnpack_pt2e.py
            __init__.py
       \--- pycache
               backend_config.cpython-311.pyc
                executorch.cpython-311.pyc
                fbgemm.cpython-311.pyc
                native.cpython-311.pyc
               observation_type.cpython-311.pyc
               onednn.cpython-311.pyc
               qnnpack.cpython-311.pyc
                tensorrt.cpython-311.pyc
               utils.cpython-311.pyc
               x86.cpython-311.pyc
                _common_operator_config_utils.cpython-311.pyc
                _qnnpack_pt2e.cpython-311.pyc
                init .cpython-311.pyc
```

```
1 1
         convert.py
         custom config.py
         fuse.py
         fuse handler.py
         graph_module.py
         lower to fbgemm.py
         lower_to_qnnpack.py
         lstm_utils.py
         match utils.py
         pattern_utils.py
         prepare.py
         qconfig_mapping_utils.py
         quantize handler.py
         tracer.py
         utils.py
         _decomposed.py
         equalize.py
         _lower_to_native_backend.py
         init .py
     +--- model report
             detector.py
             model report.py
             model report observer.py
             model_report_visualizer.py
             init__.py
         \--- pycache
                 detector.cpython-311.pyc
                 model report.cpython-311.pyc
                 model_report_observer.cpython-311.pyc
                 model report visualizer.cpython-311.pyc
                 __init__.cpython-311.pyc
     \---__pycache__
             convert.cpython-311.pyc
             custom_config.cpython-311.pyc
             fuse.cpython-311.pyc
             fuse_handler.cpython-311.pyc
             graph_module.cpython-311.pyc
             lower_to_fbgemm.cpython-311.pyc
             lower_to_qnnpack.cpython-311.pyc
             lstm utils.cpython-311.pyc
             match_utils.cpython-311.pyc
             pattern utils.cpython-311.pyc
             prepare.cpython-311.pyc
             qconfig mapping utils.cpython-311.pyc
             quantize_handler.cpython-311.pyc
             tracer.cpython-311.pyc
```

```
utils.cpython-311.pyc
            decomposed.cpython-311.pyc
            _equalize.cpython-311.pyc
            _lower_to_native_backend.cpython-311.pyc
            __init__.cpython-311.pyc
+---pt2e
        duplicate dq pass.py
        export_utils.py
        graph_utils.py
        port metadata pass.py
        prepare.py
        qat utils.py
        utils.py
        numeric debugger.py
        __init__.py
| +---representation
| | rewrite.py
            __init__.py
\---__pycache__
                rewrite.cpython-311.pyc
                __init__.cpython-311.pyc
   \--- pycache
            duplicate_dq_pass.cpython-311.pyc
            export utils.cpython-311.pyc
            graph_utils.cpython-311.pyc
            port metadata pass.cpython-311.pyc
            prepare.cpython-311.pyc
            qat utils.cpython-311.pyc
            utils.cpython-311.pyc
            numeric debugger.cpython-311.pyc
            __init__.cpython-311.pyc
+---quantizer
| | composable quantizer.py
        embedding_quantizer.py
        quantizer.py
        utils.py
        x86_inductor_quantizer.py
        xnnpack_quantizer.py
    xnnpack_quantizer_utils.py
        xpu inductor quantizer.py
        __init__.py
 | \---_pycache_
            composable quantizer.cpython-311.pyc
            embedding_quantizer.cpython-311.pyc
            quantizer.cpython-311.pyc
```

```
utils.cpython-311.pyc
                   x86 inductor quantizer.cpython-311.pyc
                   xnnpack_quantizer.cpython-311.pyc
                   xnnpack quantizer utils.cpython-311.pyc
                   xpu_inductor_quantizer.cpython-311.pyc
                    init .cpython-311.pyc
       \---_pycache_
               fake_quantize.cpython-311.pyc
               fuser_method_mappings.cpython-311.pyc
               fuse modules.cpython-311.pyc
               observer.cpython-311.pyc
               gconfig.cpython-311.pyc
               qconfig_mapping.cpython-311.pyc
               quantization mappings.cpython-311.pyc
               quantize.cpython-311.pyc
               quantize fx.cpython-311.pyc
               quantize_jit.cpython-311.pyc
               quantize pt2e.cpython-311.pyc
               quant_type.cpython-311.pyc
               stubs.cpython-311.pyc
               utils.cpython-311.pyc
               correct bias.cpython-311.pyc
               _equalize.cpython-311.pyc
               learnable fake quantize.cpython-311.pyc
               __init__.cpython-311.pyc
   \---__pycache__
           __init__.cpython-311.pyc
+---autograd
       anomaly_mode.py
       forward_ad.py
       function.py
       functional.py
       gradcheck.py
       grad_mode.py
       graph.py
       profiler.py
       profiler legacy.py
       profiler_util.py
       variable.py
       __init__.py
   +--- functions
           tensor.py
           utils.py
           __init__.py
   -
      \---__pycache__
               tensor.cpython-311.pyc
```

```
1 1 1
               utils.cpython-311.pyc
                __init__.cpython-311.pyc
     anomaly_mode.cpython-311.pyc
              forward ad.cpython-311.pyc
              function.cpython-311.pyc
              functional.cpython-311.pyc
             gradcheck.cpython-311.pyc
              grad_mode.cpython-311.pyc
              graph.cpython-311.pyc
              profiler.cpython-311.pyc
             profiler legacy.cpython-311.pyc
             profiler_util.cpython-311.pyc
              variable.cpython-311.pyc
              __init__.cpython-311.pyc
1 1
     | +---backends
     | | +---cpu
     init .cpython-311.pyc
      | | +---cuda
     __init__.cpython-311.pyc
     | | +---cudnn
      | | | rnn.py
      rnn.cpython-311.pyc
                __init__.cpython-311.pyc
     | | +---cusparselt
      __init__.cpython-311.pyc
     1
     | | +---mha
     __init__.cpython-311.pyc
```

```
| | +---mkl
  1 1
  | | __init__.cpython-311.pyc
| | +---mkldnn
  Τ
  | | | __init__.cpython-311.pyc
  | | +---mps
  1
  1
        __init__.cpython-311.pyc
  | | +---nnpack
  __init__.cpython-311.pyc
1
  | +---openmp
1
  | | __init__.cpython-311.pyc
1
  | | +---opt_einsum
| | __init__.cpython-311.pyc
- 1
  | | +---quantized
  | | __init__.cpython-311.pyc
- 1
  1 1 1
| | +---xeon
1
  | | run_cpu.cpython-311.pyc
 __init__.cpython-311.pyc
```

```
__init__.cpython-311.pyc
| | | preprocess.py
    preprocess.cpython-311.pyc
Τ
    __init__.cpython-311.pyc
| | +--- nnapi
| | | prepare.py
     | | | serializer.py
prepare.cpython-311.pyc
    1 1 1
            serializer.cpython-311.pyc
            __init__.cpython-311.pyc
1 1 1
    1 1 1
     __init__.cpython-311.pyc
    1 1
ı
    | +---bin
    | | asmjit.dll
         fbgemm.dll
    1 1
    protoc.exe
    1 1
| +---compiler
    | | config.py
1 1 1
config.cpython-311.pyc
__init__.cpython-311.pyc
| +---contrib
| | _tensorboard_vis.py
1
    1 1 1
    Τ
          _tensorboard_vis.cpython-311.pyc
1 1
           __init__.cpython-311.pyc
    | +---cpu
1 1
```

```
+---amp
                 | autocast_mode.py
                  | | grad_scaler.py
                          __init__.py
\---__pycache__
                              autocast_mode.cpython-311.pyc
                              grad scaler.cpython-311.pyc
                              __init__.cpython-311.pyc
                  \---__pycache__
                          __init__.cpython-311.pyc
           +---cuda
                  comm.py
                      error.py
ı
                      gds.py
                      graphs.py
                      jiterator.py
                      memory.py
                      nccl.py
                      nvtx.py
                      profiler.py
                      random.py
                      sparse.py
                      streams.py
                      tunable.py
                      _gpu_trace.py
                      _memory_viz.py
                      _sanitizer.py
                      _utils.py
                      __init__.py
                  +---amp
                  | | autocast_mode.py
                          common.py
                          grad_scaler.py
                          __init__.py
                      \---__pycache__
                              autocast_mode.cpython-311.pyc
                              common.cpython-311.pyc
                              grad_scaler.cpython-311.pyc
                              __init__.cpython-311.pyc
                  \---_pycache__
Ī
                          comm.cpython-311.pyc
                          error.cpython-311.pyc
           gds.cpython-311.pyc
                          graphs.cpython-311.pyc
                          jiterator.cpython-311.pyc
```

```
memory.cpython-311.pyc
           nccl.cpython-311.pyc
           nvtx.cpython-311.pyc
           profiler.cpython-311.pyc
           random.cpython-311.pyc
           sparse.cpython-311.pyc
           streams.cpython-311.pyc
           tunable.cpython-311.pyc
           _gpu_trace.cpython-311.pyc
           _memory_viz.cpython-311.pyc
           _sanitizer.cpython-311.pyc
           _utils.cpython-311.pyc
           init .cpython-311.pyc
+---distributed
       argparse_util.py
       c10d_logger.py
       collective_utils.py
       constants.py
       device_mesh.py
       distributed c10d.py
       launch.py
        logging handlers.py
       remote_device.py
        rendezvous.py
       run.py
       utils.py
       checkpointable.py
       _composable_state.py
       functional collectives.py
       _functional_collectives_impl.py
       _state_dict_utils.py
       __init__.py
   +---algorithms
       | join.py
           __init__.py
       +---ddp_comm_hooks
               ddp zero hook.py
               debugging_hooks.py
           default_hooks.py
               mixed_precision_hooks.py
               optimizer_overlap_hooks.py
               post localSGD hook.py
               powerSGD_hook.py
               quantization_hooks.py
               __init__.py
      | \---__pycache__
                   ddp zero hook.cpython-311.pyc
```

```
debugging_hooks.cpython-311.pyc
                 default hooks.cpython-311.pyc
                 mixed_precision_hooks.cpython-311.pyc
                 optimizer overlap hooks.cpython-311.pyc
                 post_localSGD_hook.cpython-311.pyc
                 powerSGD hook.cpython-311.pyc
                 quantization_hooks.cpython-311.pyc
                  init .cpython-311.pyc
     | +---model_averaging
     | | averagers.py
       | | hierarchical_model_averager.py
     | | utils.py
     averagers.cpython-311.pyc
                 hierarchical_model_averager.cpython-311.pyc
                 utils.cpython-311.pyc
                 __init__.cpython-311.pyc
     | +---_checkpoint
       | | checkpoint wrapper.py
     | \---_pycache__
                 checkpoint_wrapper.cpython-311.pyc
                 __init__.cpython-311.pyc
     | +--- comm hooks
     | | default_hooks.py
     | \---__pycache__
                 default_hooks.cpython-311.pyc
                  __init__.cpython-311.pyc
       +--- optimizer overlap
     | | optimizer_overlap.py
     | \---_pycache__
                 optimizer_overlap.cpython-311.pyc
                 __init__.cpython-311.pyc
    | +---_quantization
     | | | quantization.py
    quantization.cpython-311.pyc
```

```
__init__.cpython-311.pyc
  \---__pycache__
           join.cpython-311.pyc
           __init__.cpython-311.pyc
+---autograd
\---_pycache_
           __init__.cpython-311.pyc
+---checkpoint
       api.py
       default planner.py
       filesystem.py
       format_utils.py
       logger.py
       logging_handlers.py
       metadata.py
       optimizer.py
       planner.py
       planner helpers.py
       resharding.py
       staging.py
       stateful.py
       state_dict.py
       state_dict_loader.py
       state_dict_saver.py
1
   1
       storage.py
       utils.py
       _checkpointer.py
       _dedup_save_plans.py
       _dedup_tensors.py
       _fsspec_filesystem.py
       _nested_dict.py
       _sharded_tensor_utils.py
       _storage_utils.py
       _traverse.py
       version.py
       __init__.py
  \---_pycache__
           api.cpython-311.pyc
           default planner.cpython-311.pyc
           filesystem.cpython-311.pyc
           format_utils.cpython-311.pyc
           logger.cpython-311.pyc
           logging handlers.cpython-311.pyc
           metadata.cpython-311.pyc
           optimizer.cpython-311.pyc
```

```
planner.cpython-311.pyc
           planner helpers.cpython-311.pyc
           resharding.cpython-311.pyc
           staging.cpython-311.pyc
           stateful.cpython-311.pyc
           state dict.cpython-311.pyc
           state_dict_loader.cpython-311.pyc
           state dict saver.cpython-311.pyc
           storage.cpython-311.pyc
           utils.cpython-311.pyc
           checkpointer.cpython-311.pyc
           _dedup_save_plans.cpython-311.pyc
           dedup tensors.cpython-311.pyc
           _fsspec_filesystem.cpython-311.pyc
           nested dict.cpython-311.pyc
           _sharded_tensor_utils.cpython-311.pyc
           _storage_utils.cpython-311.pyc
           _traverse.cpython-311.pyc
           version.cpython-311.pyc
            __init__.cpython-311.pyc
+---elastic
   | control plane.py
   | __init__.py
    +---agent
   | +---server
    | health_check_server.py
              local_elastic_agent.py
      __init__.py
           \---_pycache_
                  api.cpython-311.pyc
                  health_check_server.cpython-311.pyc
                  local elastic agent.cpython-311.pyc
                   __init__.cpython-311.pyc
      \---__pycache__
               __init__.cpython-311.pyc
   +---events
   | | api.py
    | | handlers.py
   1 1
           __init__.py
   api.cpython-311.pyc
               handlers.cpython-311.pyc
```

```
__init__.cpython-311.pyc
| \---__pycache__
                 api.cpython-311.pyc
                 __init__.cpython-311.pyc
     | +---multiprocessing
       | | redirects.py
        | | tail_log.py
              __init__.py
       | +---errors
        | | error_handler.py
       | | handlers.py
                 __init__.py
          error handler.cpython-311.pyc
                    handlers.cpython-311.pyc
                    init .cpython-311.pyc
      | +---subprocess_handler
        | | handlers.py
                 subprocess_handler.py
                 __init__.py
       handlers.cpython-311.pyc
                    subprocess_handler.cpython-311.pyc
                     __init__.cpython-311.pyc
       | \---__pycache__
                 api.cpython-311.pyc
                 redirects.cpython-311.pyc
                 tail log.cpython-311.pyc
                 __init__.cpython-311.pyc
     | +---rendezvous
       | | api.py
           | c10d rendezvous backend.py
       | | dynamic_rendezvous.py
          | etcd_rendezvous.py
        | | etcd_rendezvous_backend.py
     | | etcd_server.py
     | | etcd_store.py
| | | | registry.py
```

```
| | static_tcp_rendezvous.py
| | | utils.py
__init__.py
 api.cpython-311.pyc
              c10d_rendezvous_backend.cpython-311.pyc
              dynamic rendezvous.cpython-311.pyc
              etcd_rendezvous.cpython-311.pyc
              etcd_rendezvous_backend.cpython-311.pyc
              etcd server.cpython-311.pyc
              etcd_store.cpython-311.pyc
              registry.cpython-311.pyc
              static_tcp_rendezvous.cpython-311.pyc
              utils.cpython-311.pyc
              __init__.cpython-311.pyc
   +---timer
 | | api.py
      | debug_info_logging.py
      | file based local timer.py
   | local_timer.py
           init .py
   \--- pycache
              api.cpython-311.pyc
              debug_info_logging.cpython-311.pyc
              file based local timer.cpython-311.pyc
              local_timer.cpython-311.pyc
              init .cpython-311.pyc
    +---utils
 | | api.py
      | distributed.py
   | | logging.py
          log level.py
           store.py
           init .py
   | +---data
    | | cycling_iterator.py
           | elastic_distributed_sampler.py
              __init__.py
           \--- pycache
                  cycling_iterator.cpython-311.pyc
                  elastic_distributed_sampler.cpython-311.pyc
                  __init__.cpython-311.pyc
api.cpython-311.pyc
```

```
distributed.cpython-311.pyc
                logging.cpython-311.pyc
                log_level.cpython-311.pyc
                store.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            control plane.cpython-311.pyc
            __init__.cpython-311.pyc
+---fsdp
        api.py
        fully_sharded_data_parallel.py
        sharded_grad_scaler.py
        wrap.py
        _common_utils.py
        _debug_utils.py
        _dynamo_utils.py
        _exec_order_utils.py
        _flat_param.py
        fsdp extensions.py
        _init_utils.py
        limiter utils.py
        _optim_utils.py
        runtime utils.py
        _shard_utils.py
        _state_dict_utils.py
        trace utils.py
        _traversal_utils.py
        unshard param utils.py
        _wrap_utils.py
        __init__.py
   - 1
   +--- fully shard
           _fsdp_api.py
            _fsdp_collectives.py
            _fsdp_common.py
           _fsdp_init.py
           _fsdp_param.py
            _fsdp_param_group.py
            _fsdp_state.py
            _fully_shard.py
            __init__.py
    1 1
       \--- pycache
                _fsdp_api.cpython-311.pyc
                _fsdp_collectives.cpython-311.pyc
                _fsdp_common.cpython-311.pyc
                _fsdp_init.cpython-311.pyc
                _fsdp_param.cpython-311.pyc
                _fsdp_param_group.cpython-311.pyc
```

```
_fsdp_state.cpython-311.pyc
               _fully_shard.cpython-311.pyc
                __init__.cpython-311.pyc
   \---__pycache__
            api.cpython-311.pyc
            fully_sharded_data_parallel.cpython-311.pyc
            sharded grad scaler.cpython-311.pyc
            wrap.cpython-311.pyc
            _common_utils.cpython-311.pyc
            _debug_utils.cpython-311.pyc
            _dynamo_utils.cpython-311.pyc
            exec order utils.cpython-311.pyc
            _flat_param.cpython-311.pyc
            fsdp extensions.cpython-311.pyc
            _init_utils.cpython-311.pyc
            _limiter_utils.cpython-311.pyc
            _optim_utils.cpython-311.pyc
            runtime utils.cpython-311.pyc
            _shard_utils.cpython-311.pyc
            state dict utils.cpython-311.pyc
            _trace_utils.cpython-311.pyc
            traversal utils.cpython-311.pyc
            _unshard_param_utils.cpython-311.pyc
            wrap utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---launcher
| | api.py
 \---__pycache__
           api.cpython-311.pyc
            __init__.cpython-311.pyc
| | functional.py
       __init__.py
| +---api
| | remote_module.py
      | __init__.py
      \---__pycache__
               remote_module.cpython-311.pyc
                __init__.cpython-311.pyc
| +---jit
| | | instantiator.py
```

```
| | remote module template.py
  __init__.py
           \---_pycache_
                  remote module template.cpython-311.pyc
                   __init__.cpython-311.pyc
       \---_pycache_
               instantiator.cpython-311.pyc
               __init__.cpython-311.pyc
   \--- pycache
           functional.cpython-311.pyc
           init .cpython-311.pyc
+---optim
       apply_optimizer_in_backward.py
       functional adadelta.py
       functional_adagrad.py
       functional adam.py
       functional_adamax.py
       functional adamw.py
       functional_rmsprop.py
       functional_rprop.py
       functional sgd.py
       named_optimizer.py
       optimizer.py
       post_localSGD_optimizer.py
       utils.py
       zero_redundancy_optimizer.py
       zero_redundancy_optimizer.pyi
       _deprecation_warning.py
       init .py
  \---_pycache_
           apply_optimizer_in_backward.cpython-311.pyc
           functional adadelta.cpython-311.pyc
           functional_adagrad.cpython-311.pyc
           functional adam.cpython-311.pyc
           functional_adamax.cpython-311.pyc
           functional_adamw.cpython-311.pyc
           functional rmsprop.cpython-311.pyc
           functional_rprop.cpython-311.pyc
           functional sgd.cpython-311.pyc
           named_optimizer.cpython-311.pyc
           optimizer.cpython-311.pyc
           post_localSGD_optimizer.cpython-311.pyc
           utils.cpython-311.pyc
           zero_redundancy_optimizer.cpython-311.pyc
           deprecation warning.cpython-311.pyc
```

```
__init__.cpython-311.pyc
+---pipelining
        microbatch.py
schedules.py
        stage.py
        _backward.py
        debug.py
        _IR.py
        _unflatten.py
        utils.py
        __init__.py
   \---__pycache__
            microbatch.cpython-311.pyc
            schedules.cpython-311.pyc
            stage.cpython-311.pyc
            _backward.cpython-311.pyc
            _debug.cpython-311.pyc
            _IR.cpython-311.pyc
            unflatten.cpython-311.pyc
            _utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---rpc
api.py
   | backend_registry.py
        constants.py
        functions.py
        internal.py
    1
        options.py
        rref_proxy.py
       server_process_global_profiler.py
        _utils.py
        __init__.py
   +---_testing
   | | faulty agent backend registry.py
      | __init__.py
       \---__pycache__
                faulty_agent_backend_registry.cpython-311.pyc
                __init__.cpython-311.pyc
   \--- pycache
            api.cpython-311.pyc
            backend_registry.cpython-311.pyc
            constants.cpython-311.pyc
            functions.cpython-311.pyc
            internal.cpython-311.pyc
            options.cpython-311.pyc
```

```
rref_proxy.cpython-311.pyc
                  server_process_global_profiler.cpython-311.pyc
                  _utils.cpython-311.pyc
                  __init__.cpython-311.pyc
       +---tensor
             device_mesh.py
      placement_types.py
              _api.py
              _collective_utils.py
              _dispatch.py
              _dtensor_spec.py
              _op_schema.py
              redistribute.py
              _sharding_prop.py
              _shards_wrapper.py
              _tp_conv.py
              _utils.py
              __init__.py
         +---debug
         | _comm_mode.py
           | op_coverage.py
              | _visualize_sharding.py
                  __init__.py
           | \---__pycache__
                     _comm_mode.cpython-311.pyc
                     _op_coverage.cpython-311.pyc
                     _visualize_sharding.cpython-311.pyc
                     __init__.cpython-311.pyc
          +---experimental
          | attention.py
                _func_map.py
                 _register_sharding.py
                 _tp_transform.py
                 __init__.py
              \---__pycache__
                     _attention.cpython-311.pyc
                     _func_map.cpython-311.pyc
                     _register_sharding.cpython-311.pyc
                     _tp_transform.cpython-311.pyc
                     __init__.cpython-311.pyc
         +---parallel
      | | ddp.py
fsdp.py
```

```
input_reshard.py
         loss.py
style.py
         _data_parallel_utils.py
         _utils.py
         init .py
     \--- pycache
             api.cpython-311.pyc
             ddp.cpython-311.pyc
             fsdp.cpython-311.pyc
             input_reshard.cpython-311.pyc
             loss.cpython-311.pyc
             style.cpython-311.pyc
             data parallel utils.cpython-311.pyc
             _utils.cpython-311.pyc
             __init__.cpython-311.pyc
   utils.py
         _common_rules.py
         _conv_ops.py
         einsum strategy.py
         _embedding_ops.py
         experimental ops.py
         _math_ops.py
         _matrix_ops.py
         _pointwise_ops.py
         _random_ops.py
         _tensor_ops.py
         _view_ops.py
         __init__.py
   \---__pycache__
             utils.cpython-311.pyc
             common rules.cpython-311.pyc
             _conv_ops.cpython-311.pyc
             einsum strategy.cpython-311.pyc
             _embedding_ops.cpython-311.pyc
             experimental ops.cpython-311.pyc
             _math_ops.cpython-311.pyc
             _matrix_ops.cpython-311.pyc
             _pointwise_ops.cpython-311.pyc
             _random_ops.cpython-311.pyc
             _tensor_ops.cpython-311.pyc
             _view_ops.cpython-311.pyc
             __init__.cpython-311.pyc
\---_pycache__
        device_mesh.cpython-311.pyc
         placement types.cpython-311.pyc
```

```
_api.cpython-311.pyc
               collective utils.cpython-311.pyc
               _dispatch.cpython-311.pyc
               dtensor spec.cpython-311.pyc
               _op_schema.cpython-311.pyc
               random.cpython-311.pyc
               _redistribute.cpython-311.pyc
               sharding prop.cpython-311.pyc
               _shards_wrapper.cpython-311.pyc
               _tp_conv.cpython-311.pyc
               utils.cpython-311.pyc
               __init__.cpython-311.pyc
   | +---_composable
      | | checkpoint activation.py
      | | contract.py
       | replicate.py
      | +---fsdp
      | | | fully shard.py
      fully shard.cpython-311.pyc
                  __init__.cpython-311.pyc
      | \---__pycache__
               checkpoint_activation.cpython-311.pyc
               contract.cpython-311.pyc
               replicate.cpython-311.pyc
               __init__.cpython-311.pyc
      +---_shard
   | common_op_utils.py
      | | metadata.py
      | | op registry utils.py
      | | sharder.py
      | | utils.py
            __init__.py
      | +---checkpoint
      __init__.cpython-311.pyc
 | | +---sharded optim
```

```
api.cpython-311.pyc
                              __init__.cpython-311.pyc
+---sharded tensor
                  | | api.py
                   | | logger.py
                          logging_handlers.py
                          metadata.py
                   1
                      - 1
                          reshard.py
                          shard.py
                          utils.py
                          __init__.py
                     +---_ops
                     | | binary_cmp.py
                             init.py
                          | misc_ops.py
                      | tensor_ops.py
                             common.py
                             __init__.py
                   1 1
                          \---__pycache__
                                 binary cmp.cpython-311.pyc
                                 init.cpython-311.pyc
                                 misc_ops.cpython-311.pyc
                                tensor ops.cpython-311.pyc
                                 _common.cpython-311.pyc
                                 __init__.cpython-311.pyc
                       \--- pycache
                             api.cpython-311.pyc
                             logger.cpython-311.pyc
                             logging_handlers.cpython-311.pyc
                             metadata.cpython-311.pyc
                             reshard.cpython-311.pyc
                             shard.cpython-311.pyc
                             utils.cpython-311.pyc
                              init .cpython-311.pyc
                   +---sharding_plan
                | __init__.py
                      | \---_pycache__
Ī
                             api.cpython-311.pyc
                             __init__.cpython-311.pyc
               | +---sharding_spec
```

```
| | | | chunk_sharding_spec.py
 | | | | internals.py
 | | +---chunk_sharding_spec_ops
      | | | embedding.py
        | | embedding_bag.py
        | | common.py
                 __init__.py
        embedding.cpython-311.pyc
                   embedding bag.cpython-311.pyc
                   _common.cpython-311.pyc
                    __init__.cpython-311.pyc
      api.cpython-311.pyc
                 chunk_sharding_spec.cpython-311.pyc
                 _internals.cpython-311.pyc
                 __init__.cpython-311.pyc
     | \---__pycache__
              api.cpython-311.pyc
              common op utils.cpython-311.pyc
              metadata.cpython-311.pyc
              op_registry_utils.cpython-311.pyc
             sharder.cpython-311.pyc
              _utils.cpython-311.pyc
              init .cpython-311.pyc
 | +--- sharded tensor
 | \---_pycache__
             __init__.cpython-311.pyc
     +--- sharding spec
   | \---_pycache__
            __init__.cpython-311.pyc
     +---_symmetric_memory
     | \---_pycache__
              __init__.cpython-311.pyc
 1 1 1
```

```
placement_types.py
           init .py
       \---__pycache__
               api.cpython-311.pyc
               placement types.cpython-311.pyc
                __init__.cpython-311.pyc
    +---_tools
           fsdp2_mem_tracker.py
           ilp_utils.py
           memory_tracker.py
           mem tracker.py
           mod_tracker.py
           runtime estimator.py
           sac_estimator.py
           sac ilp.py
            __init__.py
       \---_pycache_
                fsdp2 mem tracker.cpython-311.pyc
               ilp_utils.cpython-311.pyc
               memory tracker.cpython-311.pyc
               mem_tracker.cpython-311.pyc
               mod tracker.cpython-311.pyc
               runtime_estimator.cpython-311.pyc
               sac_estimator.cpython-311.pyc
               sac ilp.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
           argparse util.cpython-311.pyc
            c10d_logger.cpython-311.pyc
            collective utils.cpython-311.pyc
            constants.cpython-311.pyc
            device mesh.cpython-311.pyc
            distributed_c10d.cpython-311.pyc
            launch.cpython-311.pyc
            logging_handlers.cpython-311.pyc
            remote device.cpython-311.pyc
            rendezvous.cpython-311.pyc
            run.cpython-311.pyc
           utils.cpython-311.pyc
            _checkpointable.cpython-311.pyc
            composable state.cpython-311.pyc
            _functional_collectives.cpython-311.pyc
            _functional_collectives_impl.cpython-311.pyc
            _state_dict_utils.cpython-311.pyc
            init .cpython-311.pyc
+---distributions
```

```
bernoulli.py
            beta.py
            binomial.py
            categorical.py
            cauchy.py
            chi2.py
            constraints.py
            constraint registry.py
            continuous bernoulli.py
            dirichlet.py
            distribution.py
            exponential.py
            exp family.py
            fishersnedecor.py
            gamma.py
            geometric.py
            gumbel.py
            half_cauchy.py
            half normal.py
            independent.py
            inverse gamma.py
            kl.py
            kumaraswamy.py
            laplace.py
            lkj cholesky.py
            logistic_normal.py
            log_normal.py
            lowrank multivariate normal.py
            mixture_same_family.py
            multinomial.py
            multivariate_normal.py
            negative_binomial.py
            normal.py
            one_hot_categorical.py
            pareto.py
            poisson.py
            relaxed_bernoulli.py
            relaxed categorical.py
            studentT.py
            transformed distribution.py
            transforms.py
            uniform.py
            utils.py
            von_mises.py
            weibull.py
            wishart.py
            __init__.py
\---_pycache_
                bernoulli.cpython-311.pyc
                beta.cpython-311.pyc
```

```
binomial.cpython-311.pyc
           categorical.cpython-311.pyc
           cauchy.cpython-311.pyc
           chi2.cpython-311.pyc
           constraints.cpython-311.pyc
           constraint registry.cpython-311.pyc
           continuous_bernoulli.cpython-311.pyc
           dirichlet.cpython-311.pyc
           distribution.cpython-311.pyc
           exponential.cpython-311.pyc
           exp family.cpython-311.pyc
           fishersnedecor.cpython-311.pyc
           gamma.cpython-311.pyc
           geometric.cpython-311.pyc
           gumbel.cpython-311.pyc
           half_cauchy.cpython-311.pyc
           half normal.cpython-311.pyc
           independent.cpython-311.pyc
            inverse gamma.cpython-311.pyc
           kl.cpython-311.pyc
            kumaraswamy.cpython-311.pyc
           laplace.cpython-311.pyc
           lkj cholesky.cpython-311.pyc
           logistic_normal.cpython-311.pyc
           log normal.cpython-311.pyc
           lowrank_multivariate_normal.cpython-311.pyc
           mixture_same_family.cpython-311.pyc
           multinomial.cpython-311.pyc
           multivariate_normal.cpython-311.pyc
           negative binomial.cpython-311.pyc
           normal.cpython-311.pyc
           one hot categorical.cpython-311.pyc
           pareto.cpython-311.pyc
           poisson.cpython-311.pyc
           relaxed_bernoulli.cpython-311.pyc
           relaxed categorical.cpython-311.pyc
           studentT.cpython-311.pyc
           transformed distribution.cpython-311.pyc
           transforms.cpython-311.pyc
           uniform.cpython-311.pyc
           utils.cpython-311.pyc
           von_mises.cpython-311.pyc
           weibull.cpython-311.pyc
           wishart.cpython-311.pyc
            init .cpython-311.pyc
+---export
       custom_obj.py
   -
       decomp utils.py
       dynamic_shapes.py
       exported program.py
```

```
| | graph_signature.py
 | | unflatten.py
 | | draft_export.py
          _remove_auto_functionalized_pass.py
      remove_effect_tokens_pass.py
       | safeguard.py
          _swap.py
          trace.py
         _tree_utils.py
       | _unlift.py
          __init__.py
      +---experimental
      | \---__pycache__
            __init__.cpython-311.pyc
      +---passes
   | \---__pycache__
                 __init__.cpython-311.pyc
       \---_pycache__
              custom obj.cpython-311.pyc
              decomp_utils.cpython-311.pyc
              dynamic shapes.cpython-311.pyc
              exported_program.cpython-311.pyc
              graph signature.cpython-311.pyc
              unflatten.cpython-311.pyc
              _draft_export.cpython-311.pyc
              _remove_auto_functionalized_pass.cpython-311.pyc
              _remove_effect_tokens_pass.cpython-311.pyc
              _safeguard.cpython-311.pyc
              swap.cpython-311.pyc
              _trace.cpython-311.pyc
              _tree_utils.cpython-311.pyc
              _unlift.cpython-311.pyc
              init .cpython-311.pyc
 | +---fft
 1 1 1
      \--- pycache
              __init__.cpython-311.pyc
 | +---func
 1 1 1
```

```
__init__.cpython-311.pyc
          | +---futures
                 | __init__.py
          1 1 1
                 \---_pycache__
                         __init__.cpython-311.pyc
              +---fx
                      annotate.py
                 - 1
                      config.py
                      graph.py
                      graph module.py
                      immutable_collections.py
                      interpreter.py
                      node.py
                      operator_schemas.py
                      proxy.py
                      subgraph_rewriter.py
                      tensor_type.py
                      traceback.py
                      _compatibility.py
                      _lazy_graph_module.py
                      _pytree.py
                      symbolic trace.py
                      _utils.py
                      __init__.py
                 +---experimental
                        accelerator partitioner.py
                 1 1
                        const_fold.py
                         debug.py
                         graph_gradual_typechecker.py
                         merge_matmul.py
                         meta_tracer.py
                         normalize.py
                         optimization.py
                         partitioner utils.py
                         proxy_tensor.py
                         recording.py
                         refinement_types.py
                    rewriter.py
                         schema_type_annotation.py
                         symbolic_shapes.py
                         sym node.py
                         unify_refinements.py
                      Ī
                         validator.py
                         _backward_state.py
                 1 1
                         _config.py
                        _constant_symnode.py
```

```
+---migrate_gradual_types
| | constraint.py
            constraint_generator.py
            constraint_transformation.py
            operation.py
            transform_to_z3.py
            util.py
            z3_types.py
            __init__.py
        \---_pycache_
                constraint.cpython-311.pyc
                constraint_generator.cpython-311.pyc
                constraint transformation.cpython-311.pyc
                operation.cpython-311.pyc
                transform_to_z3.cpython-311.pyc
                util.cpython-311.pyc
                z3_types.cpython-311.pyc
                __init__.cpython-311.pyc
   +---unification
            dispatch.py
            match.py
            more.py
            unification_tools.py
            utils.py
            variable.py
            __init__.py
        +---multipledispatch
    | | conflict.py
                core.py
                dispatcher.py
                utils.py
                variadic.py
                init .py
            \--- pycache
                    conflict.cpython-311.pyc
                    core.cpython-311.pyc
                    dispatcher.cpython-311.pyc
                    utils.cpython-311.pyc
                    variadic.cpython-311.pyc
                    __init__.cpython-311.pyc
       \---__pycache__
                core.cpython-311.pyc
                dispatch.cpython-311.pyc
                match.cpython-311.pyc
```

```
more.cpython-311.pyc
                unification tools.cpython-311.pyc
                utils.cpython-311.pyc
                variable.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
            accelerator partitioner.cpython-311.pyc
            const fold.cpython-311.pyc
            debug.cpython-311.pyc
            graph gradual typechecker.cpython-311.pyc
            merge_matmul.cpython-311.pyc
            meta tracer.cpython-311.pyc
            normalize.cpython-311.pyc
            optimization.cpython-311.pyc
            partitioner_utils.cpython-311.pyc
            proxy_tensor.cpython-311.pyc
            recording.cpython-311.pyc
            refinement types.cpython-311.pyc
            rewriter.cpython-311.pyc
            schema type annotation.cpython-311.pyc
            symbolic_shapes.cpython-311.pyc
            sym node.cpython-311.pyc
            unify_refinements.cpython-311.pyc
            validator.cpython-311.pyc
            backward state.cpython-311.pyc
            _config.cpython-311.pyc
            constant symnode.cpython-311.pyc
            __init__.cpython-311.pyc
+---passes
        annotate getitem nodes.py
        fake_tensor_prop.py
        graph drawer.py
        graph_manipulation.py
        graph transform observer.py
        net_min_base.py
        operator support.py
        param_fetch.py
        pass manager.py
        reinplace.py
        runtime_assert.py
        shape_prop.py
        splitter_base.py
        split module.py
        split_utils.py
        tools common.py
        _tensorify_python_scalars.py
__init__.py
   +---backends
```

```
| | | | cudagraphs.py
cudagraphs.cpython-311.pyc
                 __init__.cpython-311.pyc
       | | +---dialect
        | +---common
         | | | cse_pass.py
         cse_pass.cpython-311.pyc
         __init__.cpython-311.pyc
I
        | __init__.cpython-311.pyc
      1
        | | partitioner.py
        | | pass_base.py
         | | pass manager.py
        1 1 1
         partitioner.cpython-311.pyc
                pass base.cpython-311.pyc
                pass_manager.cpython-311.pyc
                 __init__.cpython-311.pyc
     | +---tests
       | | | test_pass_manager.py
         test_pass_manager.cpython-311.pyc
                 init .cpython-311.pyc
Τ
     | +---utils
      | | | common.py
        | | fuser_utils.py
          | | matcher utils.py
        | | matcher_with_name_node_map_utils.py
         | | source matcher utils.py
     common.cpython-311.pyc
```

```
fuser_utils.cpython-311.pyc
                    matcher utils.cpython-311.pyc
                   matcher_with_name_node_map_utils.cpython-311.pyc
                    source matcher utils.cpython-311.pyc
                    __init__.cpython-311.pyc
       \---__pycache__
                annotate getitem nodes.cpython-311.pyc
                fake_tensor_prop.cpython-311.pyc
                graph_drawer.cpython-311.pyc
                graph manipulation.cpython-311.pyc
                graph_transform_observer.cpython-311.pyc
               net min base.cpython-311.pyc
                operator_support.cpython-311.pyc
               param fetch.cpython-311.pyc
               pass_manager.cpython-311.pyc
                reinplace.cpython-311.pyc
                runtime_assert.cpython-311.pyc
                shape prop.cpython-311.pyc
                splitter_base.cpython-311.pyc
                split module.cpython-311.pyc
                split_utils.cpython-311.pyc
                tools common.cpython-311.pyc
                _tensorify_python_scalars.cpython-311.pyc
                init .cpython-311.pyc
   \---_pycache__
           annotate.cpython-311.pyc
           config.cpython-311.pyc
           graph.cpython-311.pyc
           graph_module.cpython-311.pyc
           immutable collections.cpython-311.pyc
           interpreter.cpython-311.pyc
           node.cpython-311.pyc
           operator_schemas.cpython-311.pyc
           proxy.cpython-311.pyc
           subgraph_rewriter.cpython-311.pyc
           tensor type.cpython-311.pyc
           traceback.cpython-311.pyc
           compatibility.cpython-311.pyc
            _lazy_graph_module.cpython-311.pyc
           _pytree.cpython-311.pyc
           _symbolic_trace.cpython-311.pyc
           _utils.cpython-311.pyc
            init .cpython-311.pyc
+---include
       cpuinfo.h
       dnnl.h
       dnnl_config.h
       dnnl debug.h
```

```
dnnl_ocl.h
    dnnl_sycl.h
    dnnl_sycl_types.h
    dnnl_threadpool.h
    dnnl_types.h
    dnnl version.h
    experiments-config.h
    fp16.h
    fxdiv.h
    libshm.h
    psimd.h
    pthreadpool.h
    sleef.h
    xnnpack.h
+---ATen
        AccumulateType.h
        ArrayRef.h
        ATen.h
autocast_mode.h
        Backend.h
        Backtrace.h
        BlasBackend.h
        CachedTensorUtils.h
        ceil div.h
        code_template.h
        CollapseDims.h
        CompositeExplicitAutogradFunctions.h
        {\tt CompositeExplicitAutogradFunctions\_inl.h}
        {\tt CompositeExplicitAutogradNonFunctionalFunctions.h}
1
        {\tt CompositeExplicitAutogradNonFunctionalFunctions\_inl.h}
        CompositeImplicitAutogradFunctions.h
        CompositeImplicitAutogradFunctions_inl.h
        CompositeImplicitAutogradNestedTensorFunctions.h
        {\tt CompositeImplicitAutogradNestedTensorFunctions\_inl.h}
        Config.h
        Context.h
        cpp_custom_type_hack.h
        CPUApplyUtils.h
        CPUFixedAllocator.h
        CPUFunctions.h
        CPUFunctions_inl.h
        CPUGeneratorImpl.h
        CUDAFunctions.h
        CUDAFunctions inl.h
1
        Device.h
        DeviceAccelerator.h
        DeviceGuard.h
Dimname.h
        DimVector.h
        Dispatch.h
```

I	1	I	I	I		Dispatch_v2.h
	I	I	I	I	1	div_rtn.h
	I	I	I	I	1	DLConvertor.h
l	I	l	I	I		dlpack.h
	I		I	I		DynamicLibrary.h
	I	I	I	I		EmptyTensor.h
l	I		I	I		ExpandBase.h
	I		I	I	1	ExpandUtils.h
l	I		I	I	I	Formatting.h
l	I		I	I		FunctionalStorageImpl.h
	I		I	I	1	FunctionalTensorWrapper.h
	I	I	I	I	1	Functions.h
	I		I	I	1	FuncTorchTLS.h
I	I	I	ı	ı	I	Generator.h
	I	I	I	I	I	InferSize.h
I	I	I	ı	ı	I	InitialTensorOptions.h
ı	I	ı	ı	ı	ı	jiterator macros.h
I	I	i I	I	i I	I	jit macros.h
	' 	i I		I	' 	Layout.h
	1	I			' 	LegacyBatchedFallback.h
	1					
	1					LegacyBatchedTensorImpl.h
						LegacyVmapMode.h
						LegacyVmapTransforms.h
l	I	I	I	I	1	LinalgBackend.h
	I		I	I	1	MapAllocator.h
	I	I	I	I	1	MatrixRef.h
l	I	l	I	I		MemoryOverlap.h
	I		I	I		MetaFunctions.h
l	I		I	I		MetaFunctions_inl.h
	I		I	I	1	MethodOperators.h
l	I		I	I	I	NamedTensor.h
	I	I	I	I		NamedTensorUtils.h
	I	I	I	I	1	NativeFunctions.h
	I		I	I		NativeMetaFunctions.h
I	I	I	I	I		NestedTensorImpl.h
I	I	l	I	I	I	NumericUtils.h
	I	I	I	I	I	OpaqueTensorImpl.h
I	I	I	ı	ı	I	Operators.h
I	ı	I	ı	ı	I	OpMathType.h
I	I	i I	i I	i I	i I	PadNd.h
I		I			I	Parallel-inl.h
' 	1	' I		1	' 	Parallel.h
	1					ParallelFuture.h
	1	1				
						ParallelNative.h
			1	1		ParallelOpenMP.h
I	1	I	1	1		PTThreadPool.h
I	1	I	I	I		PythonTorchFunctionTLS.h
I	I	I	I	I		record_function.h
I	I	I	I	I		RedispatchFunctions.h
I	I	I	I	I		RegistrationDeclarations.h
I	I	I	I	I		SavedTensorHooks.h

```
Scalar.h
        ScalarOps.h
        ScalarType.h
        SDPBackend.h
        SequenceNumber.h
        SmallVector.h
        SparseCsrTensorImpl.h
        SparseCsrTensorUtils.h
        SparseTensorImpl.h
        Storage.h
        StorageUtils.h
1
        Tensor.h
        TensorAccessor.h
        TensorGeometry.h
        TensorIndexing.h
        TensorIterator.h
        TensorIteratorInternal.h
        TensorMeta.h
        TensorNames.h
        TensorOperators.h
        TensorOptions.h
        TensorSubclassLikeUtils.h
        TensorUtils.h
        ThreadLocalPythonObjects.h
        ThreadLocalState.h
        TracerMode.h
        TypeDefault.h
        Utils.h
        Version.h
        VmapGeneratedPlumbing.h
        WrapDimUtils.h
        WrapDimUtilsMulti.h
    +---core
            alias_info.h
            Array.h
            ATenGeneral.h
            ATenOpList.h
            ATen_fwd.h
            aten interned strings.h
            ATen_pch.h
    Backtrace.h
            blob.h
            builtin_function.h
            CachingHostAllocator.h
            CheckMemoryFormat.h
            class_type.h
            custom_class.h
   DeprecatedTypeProperties.h
            {\tt DeprecatedTypePropertiesRegistry.h}
            Dict.h
```

```
Dict_inl.h
        Dimname.h
        DimVector.h
DistributionsHelper.h
        dynamic_type.h
        enum tag.h
        enum_type.h
        Formatting.h
        function.h
        functional.h
        function schema.h
1
        function_schema_inl.h
        Generator.h
        GeneratorForPrivateuseone.h
        grad mode.h
        IListRef.h
        IListRef inl.h
        interned_strings.h
        interned_strings_class.h
        ivalue.h
        ivalue inl.h
        ivalue_to.h
1
        jit type.h
        jit_type_base.h
        LegacyTypeDispatch.h
        List.h
        List_inl.h
        MT19937RNGEngine.h
        NamedTensor.h
        NestedIntSymNodeImpl.h
1
        operator_name.h
        PhiloxRNGEngine.h
        PythonFallbackKernel.h
        PythonOpRegistrationTrampoline.h
        qualified_name.h
        QuantizerBase.h
        Range.h
        Reduction.h
        rref_interface.h
        Scalar.h
        ScalarType.h
stack.h
        symbol.h
        Tensor.h
        TensorAccessor.h
        TensorBase.h
        TensorBody.h
        TorchDispatchUtils.h
TransformationHelper.h
        typeid.h
        type factory.h
```

```
type_ptr.h
       UndefinedTensorImpl.h
       UnsafeFromTH.h
       VariableHooksInterface.h
       Variadic.h
       Vitals.h
   +---boxing
           BoxedKernel.h
            BoxedKernel_impl.h
            KernelFunction.h
            KernelFunction_impl.h
           OperatorKernel.h
        \---impl
                boxing.h
                make_boxed_from_unboxed_functor.h
                test_helpers.h
                WrapFunctionIntoFunctor.h
                WrapFunctionIntoRuntimeFunctor.h
   +---dispatch
           CppSignature.h
            Dispatcher.h
            DispatchKeyExtractor.h
           ObservedOperators.h
           OperatorEntry.h
           OperatorOptions.h
            RegistrationHandleRAII.h
   \---op_registration
           adaption.h
            infer_schema.h
           op_allowlist.h
           op_registration.h
+---cpu
       FlushDenormal.h
       Utils.h
       vml.h
            functional.h
            functional_base.h
            functional bfloat16.h
            intrinsics.h
            vec.h
            vec_base.h
            vec convert.h
            vec_half.h
            vec mask.h
```

```
vec_n.h
+---sve
        sve_helper.h
       vec_common_sve.h
       vec double.h
       vec_float.h
        vec int.h
        vec_qint.h
+---vec128
        vec128.h
       vec128 bfloat16 neon.h
       vec128_convert.h
       vec128 float neon.h
       vec128_half_neon.h
       vec128_reduced_precision_common_neon.h
+---vec256
       missing_vld1_neon.h
        missing vst1 neon.h
       vec256.h
        vec256 bfloat16.h
        vec256_complex_double.h
        vec256 complex float.h
        vec256_convert.h
        vec256_double.h
        vec256 float.h
        vec256_int.h
        vec256 mask.h
        vec256_qint.h
            vec256_bfloat16_vsx.h
            vec256_common_vsx.h
            vec256_complex_double_vsx.h
            vec256_complex_float_vsx.h
            vec256 double vsx.h
            vec256_float_vsx.h
            vec256 int16 vsx.h
            vec256_int32_vsx.h
            vec256_int64_vsx.h
            vec256_qint32_vsx.h
            vec256_qint8_vsx.h
            vec256 quint8 vsx.h
            vsx_helpers.h
    \---zarch
            vec256 zarch.h
\---vec512
```

```
vec512.h
                                        vec512 bfloat16.h
                                        vec512_complex_double.h
                                        vec512 complex float.h
                                        vec512_convert.h
                                        vec512 double.h
                                        vec512_float.h
                                        vec512 int.h
                                        vec512_mask.h
                                        vec512_qint.h
                        +---cuda
                                ApplyGridUtils.cuh
                                AsmUtils.cuh
                                ATenCUDAGeneral.h
                                Atomic.cuh
                                CachingHostAllocator.h
                                cub.cuh
                                cub.h
                        cub_definitions.cuh
                                CUDAApplyUtils.cuh
                                CUDABlas.h
                        1
                                CUDAContext.h
                                CUDAContextLight.h
                                CUDADataType.h
                                CUDADevice.h
                                CUDAEvent.h
                                CUDAGeneratorImpl.h
                                CUDAGraph.h
                                CUDAGraphsUtils.cuh
                        1
                                CUDASparse.h
                                CUDASparseBlas.h
                                CUDASparseDescriptors.h
                        CUDATensorMethods.cuh
                                CUDAUtils.h
                                DeviceUtils.cuh
                                EmptyTensor.h
                                Exceptions.h
                                jiterator.h
                                jiterator impl.h
                                llvm_jit_strings.h
                        NumericLimits.cuh
                                PeerToPeerAccess.h
                                PhiloxCudaState.h
                                PhiloxUtils.cuh
                                {\tt PinnedMemoryAllocator.h}
ı
                                ScanUtils.cuh
                                Sleep.h
                        ThrustAllocator.h
                          +---detail
```

ı	I					1	CUDAHooks.h
ı	I					1	DeviceThreadHandles.h
1	I		I	I	I	I	IndexUtils.cuh
	I	I	I	I	I	I	IntegerDivider.cuh
	I	ı	I	I	ı	ı	KernelUtils.h
			I		I	i I	LazyNVRTC.h
			I		' 	' 	OffsetCalculator.cuh
						1	PhiloxCudaStateRaw.cuh
					1		TensorInfo.cuh
	l				I	I	UnpackRaw.cuh
-	I					1	
-	I				1	\t	unable
1	I		I		1		GemmCommon.h
ı	I				1		GemmHipblaslt.h
ı	I	I			1		GemmRocblas.h
ı	I				I		StreamTimer.h
1	I		I		I		Tunable.h
	I	ı	I	I	ı		TunableGemm.h
	I	ı	ı	ı	ı		TunableOp.h
					' 		Tunad Toop III
						-cudnn	
			l		I		udnn-wrapper.h
	l					D	Descriptors.h
-	I				I	H	Mandle.h
-	I					Н	Mandles.h
1	I		I		1	Т	'ypes.h
ı	I	I	I		1	U	Jtils.h
ı	I				1		
ı	I			-	+	detai	1
1	I	l	I	I	I	A	acceleratorHooksInterface.h
	I	ı	I	I	ı	С	UDAHooksInterface.h
	I	ı	I	I	ı	F	'unctionTraits.h
			I		i I		ITPHooksInterface.h
					' 	-	IPUHooksInterface.h
					1		PUHooksInterface.h
	I		l	l	1		MAIAHooksInterface.h
-	I				1	M	MPSHooksInterface.h
-	l	I	I	I	I	M	TIAHooksInterface.h
-	I		I	l	I	P	PrivateUselHooksInterface.h
-	I					X	PUHooksInterface.h
ı	I				I		
ı	I			-	+	funct	orch
ı	I	I			I	A	DInterpreters.h
1	I	I			I	В	BatchedFallback.h
1		I	I	I	ı	В	BatchedTensorImpl.h
	I		I		i I		BatchingMetaprogramming.h
					I		BatchRulesHelper.h
							-
							ynamicLayer.h
							'unctionalizeInterpreter.h
-		I	I	I	I		nterpreter.h
-	l	I	I	I	I	I	egacyVmapTransforms.h

```
Macros.h
        PlumbingHelper.h
        TensorWrapper.h
        VmapInterpreter.h
    \---impl
            HIPAllocatorMasqueradingAsCUDA.h
            HIPCachingAllocatorMasqueradingAsCUDA.h
            {\tt HIPGuardImplMasqueradingAsCUDA.h}
            HIPStreamMasqueradingAsCUDA.h
+---miopen
        Descriptors.h
        Exceptions.h
        Handle.h
        miopen-wrapper.h
        Types.h
        Utils.h
+---mps
        EmptyTensor.h
        IndexKernels.h
        MPSAllocator.h
        MPSAllocatorInterface.h
        MPSDevice.h
        MPSEvent.h
        MPSGeneratorImpl.h
        MPSGuardImpl.h
        MPSHooks.h
        MPSProfiler.h
        MPSStream.h
+---native
        Activation.h
        AdaptivePooling.h
        AmpKernels.h
        BatchLinearAlgebra.h
        batch_norm.h
        BinaryOps.h
        BucketizationUtils.h
CanUse32BitIndexMath.h
        ComplexHelper.h
        {\tt CompositeRandomAccessor.h}
        CompositeRandomAccessorCommon.h
        ConvolutionMM3d.h
        ConvUtils.h
        Copy.h
        CPUBlas.h
CPUFallback.h
        Cross.h
```

-	I	I	- 1	- 1	l	1	DilatedConvolutionUtils.h
-	1	I	- 1	- 1	l	1	DispatchStub.h
-	1	I	- 1	I	I	I	Distance.h
- 1	1	J	- 1	- 1	I		Distributions.h
-	1	I	- 1	I	I	I	DistributionTemplates.h
-	I	I	- 1	- 1	I	ſ	EmbeddingBag.h
1	I	I	- 1	1	I	1	Fill.h
1	I	I	- 1	1	I	I	ForeachUtils.h
-	I	I	- 1	- 1	I		FractionalMaxPooling.h
-	I	I	- 1	- 1	I		FunctionOfAMatrixUtils.h
1	I	I	- 1	1	I	I	FusedAdagrad.h
1	I	I	- 1	1	I		FusedAdam.h
1	I	I	I	1	I		FusedSGD.h
1	I	I	-	1	l	I	Gelu.h
1	I	J	1	1	I	I	GridSampler.h
I	I	I	ı	I	l		GridSamplerUtils.h
1	ı	I	ı	1	l	I	group_norm.h
1	I	J	1	1	I		Histogram.h
1	ı	I	1	ı	l	I	im2col.h
i	ı	-	1	ı	1	ı	im2col_shape_check.h
i	ı	-	1	ı	l		IndexingUtils.h
i	i				i I	· 	IndexKernel.h
·	i	·			I	· 	layer_norm.h
·	i				' 	I	Lerp.h
i	İ	, 			' 	' 	LinearAlgebra.h
i	i	, 			' 	' 	LinearAlgebraUtils.h
i	i	, 			' 	' 	LossMulti.h
i	i	, 			' I	' 	Math.h
i	ı	· 			' 	' 	MathBitFallThroughLists.h
i	İ	, 			' 	' 	MathBitsFallback.h
·	i	, 			' 	' 	MaxPooling.h
'	' 	, 			' 	' 	NonEmptyUtils.h
	1	, 			' 	' 	NonSymbolicBC.h
	' 	, 			' 	' 	Normalization.h
	' 	, 			1	' 	Padding.h
	·						PixelShuffle.h
	ı				 	1	PointwiseOps.h
							Pool.h
							Pow.h
							RangeFactories.h
							ReduceAllOps.h
							ReduceOps.h
-	ı				1		ReduceOpsUtils.h
							ReductionType.h
-							Repeat.h
	I		I	I			Resize.h
	I		I	I			ResizeCommon.h
-	I		I				RNN.h
-	I		I	I			ScatterGatherChecks.h
	I		I				SegmentReduce.h
	I		I	I			SharedReduceOps.h

```
SobolEngineOpsUtils.h
        Sorting.h
SortingUtils.h
        SparseTensorUtils.h
        SpectralOpsUtils.h
        StridedRandomAccessor.h
        TensorAdvancedIndexing.h
        TensorAdvancedIndexingUtils.h
        TensorCompare.h
        TensorConversions.h
        TensorDimApply.h
1
        TensorFactories.h
        TensorIterator.h
        {\tt TensorIteratorDynamicCasting.h}
        TensorProperties.h
        TensorShape.h
        TensorTransformations.h
        TopKImpl.h
        TransposeType.h
TriangularOpsUtils.h
        TypeProperties.h
        UnaryOps.h
Unfold2d.h
        Unfold3d.h
        UnfoldBackward.h
        UpSample.h
        verbose_wrapper.h
        vol2col.h
   +---cpu
            AtomicAddFloat.h
            avx mathfun.h
            CatKernel.h
            ChannelShuffleKernel.h
            CopyKernel.h
            DepthwiseConvKernel.h
            DistributionTemplates.h
            Gelu.h
            GridSamplerKernel.h
            IndexKernelUtils.h
            Intrinsics.h
            int_mm_kernel.h
            IsContiguous.h
            LogAddExp.h
            Loops.h
            MaxUnpoolKernel.h
            mixed_data_type.h
            moments_utils.h
PixelShuffleKernel.h
            Reduce.h
            ReducedPrecisionFloatGemvFastPathKernel.h
```

1				-	1	1	ReduceUtils.h
1	1			-	1	1	SampledAddmmKernel.h
1	1		-	-	1	1	SerialStackImpl.h
1	1		I	1	I	I	SoftmaxKernel.h
I	I		I	I	I	I	SpmmReduceKernel.h
I	1		ı	1	I	I	StackKernel.h
ı	I		ı	1	ı	ı	UpSampleKernelAVXAntialias.h
ı	ı	l	ı	1	ı	ı	utils.h
ı	ı		ı	ı	ı	ı	WeightNormKernel.h
ı	ı	l	ı	1	ı	ı	zmath.h
i	i	I	i	i	i	i	
i	·		i	·	·	+	cuda
, 	i	' 	i	i	· 	·	Activation.h
ı	' 	' 	'	' 		'	BinaryInternal.h
	Ċ					'	
				1		1	block_reduce.cuh
							CompositeRandomAccessor.h
							Copy.h
ı	1				- 1	- 1	CUDAJitLoops.cuh
ı			I	ı	ı	ı	CUDALoops.cuh
ı			ı	ı	ı	ı	CuFFTPlanCache.h
ı			ı	ı	ı	ı	CuffTUtils.h
I	I		I	I	I	I	DeviceSqrt.cuh
I	I		I	I	I	I	Distributions.h
I	I		I	I	I	I	DistributionTemplates.h
I	I		I	I	I	I	EmbeddingBackwardKernel.cuh
I	I		I	I	I	I	ForeachFunctors.cuh
I			I	I	I	I	ForeachMinMaxFunctors.cuh
I			I	I	I	I	fused_adamw_amsgrad_impl.cuh
I			I	I	I	I	fused_adamw_impl.cuh
I			I	I	I	I	fused_adam_amsgrad_impl.cuh
I			I	I	I	I	fused_adam_impl.cuh
I				-	I	I	fused_adam_utils.cuh
I				-	I	-	GridSampler.cuh
I				-	I	I	GridSampler.h
1			-	-	- 1	-	im2col.cuh
1			-	-	- 1	-	IndexKernel.h
1	1			-	- 1	-	JitLoops.cuh
1				-	1	1	jit_utils.h
1	1		-	-	1	1	KernelUtils.cuh
1	1		-	-	1	1	LaunchUtils.h
1	1			-	1	1	Loops.cuh
1	1		I	1	1	1	Math.cuh
I	1		I	1	I	I	MemoryAccess.cuh
I	1		I	1	I	I	MiscUtils.h
1	1		I	1	1	I	MultiTensorApply.cuh
I	I		I	1	1	1	Normalization.cuh
	1		I	1	ı	I	PersistentSoftmax.cuh
	1		I	1	1	1	Pow.cuh
	1		I	1	1	1	Randperm.cuh
	1		I	1	1	1	Reduce.cuh
I	I		I	1	1	1	ReduceOps.h

```
{\tt reduction\_template.cuh}
        Resize.h
        RowwiseScaledMM.h
        ScanKernels.h
        ScanUtils.cuh
        Sort.h
        Sorting.h
        SortingCommon.cuh
        SortingRadixSelect.cuh
        SortStable.h
        SortUtils.cuh
        TensorModeKernel.cuh
        TensorModeKernel.h
        TensorTopK.h
        thread constants.h
        UniqueCub.cuh
        UpSample.cuh
        vol2col.cuh
+---hip
        ck_bgemm.h
        ck_gemm.h
        ck_gemm_template.h
        ck_types.h
+---mkldnn
    \---xpu
        \---detail
                Attr.h
                oneDNN.h
                oneDNNContext.h
                Utils.h
+---mps
        Copy.h
        MetalShaderLibrary.h
        MPSGraphSequoiaOps.h
        MPSGraphSonomaOps.h
        MPSGraphVenturaOps.h
        OperationUtils.h
        TensorFactory.h
        UnaryConstants.h
+---nested
        NestedTensorBinaryOps.h
        NestedTensorMath.h
        NestedTensorTransformerFunctions.h
        NestedTensorTransformerUtils.h
        NestedTensorUtils.h
+---quantized
```

```
AffineQuantizer.h
            AffineQuantizerBase.h
            ConvUtils.h
            Copy.h
            FakeQuantAffine.h
            IndexKernel.h
            PackedParams.h
        \---cpu
                BinaryOps.h
                conv serialization.h
                {\tt EmbeddingPackedParams.h}
                fbgemm utils.h
                init_qnnpack.h
                OnednnUtils.h
                qconv.h
                qembeddingbag.h
                qembeddingbag_prepack.h
                qlinear.h
                QnnpackUtils.h
                QuantizedOps.h
                QuantUtils.h
                RuyUtils.h
                XnnpackUtils.h
    +---transformers
            attention.h
            sdp_utils_cpp.h
    \---utils
            Factory.h
            ParamsHash.h
            ParamUtils.h
+---ops
        abs.h
        absolute.h
        absolute compositeimplicitautograd dispatch.h
        absolute_native.h
        absolute ops.h
        \verb"abs_composite explicit autograd_dispatch.h"
        abs_cpu_dispatch.h
        abs_cuda_dispatch.h
        abs_native.h
        abs_ops.h
        acos.h
        acosh.h
        \verb|acosh_composite explicit autograd nonfunctional_dispatch.h|
        acosh_cpu_dispatch.h
        acosh_cuda_dispatch.h
        acosh meta.h
```

```
acosh_meta_dispatch.h
acosh native.h
acosh_ops.h
acos compositeexplicitautogradnonfunctional dispatch.h
acos_cpu_dispatch.h
acos cuda dispatch.h
acos_meta.h
acos meta dispatch.h
acos_native.h
acos_ops.h
adaptive avg poolld.h
adaptive_avg_pool1d_compositeexplicitautograd_dispatch.h
adaptive avg poolld compositeimplicitautograd dispatch.h
adaptive_avg_pool1d_native.h
adaptive avg poolld ops.h
adaptive_avg_pool2d.h
adaptive_avg_pool2d_compositeimplicitautograd_dispatch.h
adaptive_avg_pool2d_cpu_dispatch.h
adaptive avg pool2d cuda dispatch.h
adaptive_avg_pool2d_native.h
adaptive avg pool2d ops.h
adaptive_avg_pool3d.h
adaptive avg pool3d backward.h
adaptive_avg_pool3d_backward_cpu_dispatch.h
adaptive avg pool3d backward cuda dispatch.h
adaptive_avg_pool3d_backward_native.h
adaptive_avg_pool3d_backward_ops.h
adaptive avg pool3d compositeimplicitautograd dispatch.h
adaptive_avg_pool3d_cpu_dispatch.h
adaptive avg pool3d cuda dispatch.h
adaptive_avg_pool3d_native.h
adaptive avg pool3d ops.h
adaptive_max_pool1d.h
adaptive max poolld compositeimplicitautograd dispatch.h
adaptive_max_poolld_native.h
adaptive max poolld ops.h
adaptive_max_pool2d.h
adaptive max pool2d backward.h
\verb|adaptive_max_pool2d_backward_composite explicit autograd nonfunctional_dispatch.h|
adaptive max pool2d backward cpu dispatch.h
adaptive_max_pool2d_backward_cuda_dispatch.h
adaptive_max_pool2d_backward_meta.h
adaptive_max_pool2d_backward_meta_dispatch.h
adaptive_max_pool2d_backward_native.h
adaptive max pool2d backward ops.h
\verb|adaptive_max_pool2d_composite explicit autograd nonfunctional_dispatch.h|
adaptive_max_pool2d_cpu_dispatch.h
adaptive_max_pool2d_cuda_dispatch.h
adaptive max pool2d meta.h
adaptive_max_pool2d_meta_dispatch.h
adaptive max pool2d native.h
```

```
adaptive_max_pool2d_ops.h
            adaptive max pool3d.h
            adaptive_max_pool3d_backward.h
            adaptive max pool3d backward compositeexplicitautogradnonfunctional dispatch.h
            adaptive_max_pool3d_backward_cpu_dispatch.h
            adaptive max pool3d backward cuda dispatch.h
            adaptive_max_pool3d_backward_meta.h
            adaptive_max_pool3d_backward_meta_dispatch.h
            adaptive_max_pool3d_backward_native.h
            adaptive_max_pool3d_backward_ops.h
            adaptive max pool3d compositeexplicitautogradnonfunctional dispatch.h
            adaptive_max_pool3d_cpu_dispatch.h
            adaptive max pool3d cuda dispatch.h
            adaptive_max_pool3d_meta.h
            adaptive max pool3d meta dispatch.h
            adaptive_max_pool3d_native.h
            adaptive max pool3d ops.h
            add.h
            addbmm.h
            addbmm_cpu_dispatch.h
            addbmm cuda dispatch.h
            addbmm_meta_dispatch.h
            addbmm native.h
            addbmm_ops.h
            addcdiv.h
            addcdiv compositeexplicitautogradnonfunctional dispatch.h
            addcdiv_cpu_dispatch.h
            addcdiv cuda dispatch.h
            addcdiv_meta.h
            addcdiv meta dispatch.h
            addcdiv_native.h
            addcdiv ops.h
            addcmul.h
            addcmul compositeexplicitautogradnonfunctional dispatch.h
            addcmul_cpu_dispatch.h
            addcmul cuda dispatch.h
            addcmul_meta.h
            addcmul meta dispatch.h
            addcmul_native.h
            addcmul ops.h
            addmm.h
            addmm_compositeexplicitautogradnonfunctional_dispatch.h
            addmm cpu dispatch.h
            addmm_cuda_dispatch.h
            addmm meta.h
            addmm_meta_dispatch.h
            addmm native.h
            addmm_ops.h
1
            addmv.h
            addmv_compositeexplicitautogradnonfunctional_dispatch.h
            addmv cpu dispatch.h
```

```
addmv_cuda_dispatch.h
addmv meta.h
addmv_meta_dispatch.h
addmv native.h
addmv_ops.h
addr.h
addr_compositeexplicitautograd_dispatch.h
addr cpu dispatch.h
addr cuda dispatch.h
addr_native.h
addr ops.h
\verb|add_composite explicit autograd nonfunctional_dispatch.h|
add compositeexplicitautograd dispatch.h
add_cpu_dispatch.h
add cuda dispatch.h
add_meta.h
add_meta_dispatch.h
add_native.h
add ops.h
adjoint.h
adjoint compositeimplicitautograd dispatch.h
adjoint_native.h
adjoint ops.h
affine_grid_generator.h
affine grid generator backward.h
affine grid generator backward compositeimplicitautograd dispatch.h
affine_grid_generator_backward_native.h
affine grid generator backward ops.h
{\tt affine\_grid\_generator\_composite explicit autograd\_dispatch.h}
affine grid generator native.h
affine_grid_generator_ops.h
alias_compositeexplicitautograd_dispatch.h
alias copy.h
alias_copy_compositeexplicitautogradnonfunctional_dispatch.h
alias copy compositeexplicitautograd dispatch.h
alias_copy_native.h
alias copy ops.h
alias_native.h
alias ops.h
align_as.h
align_as_compositeimplicitautograd_dispatch.h
align_as_native.h
align_as_ops.h
align tensors.h
\verb|align_tensors_composite implicit autograd_dispatch.h|
align_tensors_native.h
align_tensors_ops.h
align to.h
align_to_compositeimplicitautograd_dispatch.h
align to native.h
```

```
align_to_ops.h
all.h
allclose.h
allclose compositeexplicitautograd dispatch.h
allclose_native.h
allclose ops.h
\verb|all_composite explicit autograd nonfunctional_dispatch.h|
all compositeexplicitautograd dispatch.h
all_compositeimplicitautograd_dispatch.h
all_cpu_dispatch.h
all cuda dispatch.h
all_meta.h
all meta dispatch.h
all_native.h
all ops.h
alpha_dropout.h
alpha_dropout_compositeimplicitautograd_dispatch.h
alpha_dropout_native.h
alpha dropout ops.h
amax.h
amax compositeexplicitautogradnonfunctional dispatch.h
amax_cpu_dispatch.h
amax cuda dispatch.h
amax_meta.h
amax meta dispatch.h
amax native.h
amax_ops.h
amin.h
aminmax.h
aminmax_compositeexplicitautogradnonfunctional_dispatch.h
aminmax_cpu_dispatch.h
aminmax cuda dispatch.h
aminmax_meta.h
aminmax meta dispatch.h
aminmax_native.h
aminmax ops.h
\verb|amin_composite explicit autograd nonfunctional_dispatch.h|
amin cpu dispatch.h
amin_cuda_dispatch.h
amin meta.h
amin_meta_dispatch.h
amin_native.h
amin_ops.h
and.h
and compositeimplicitautograd dispatch.h
and_native.h
and ops.h
angle.h
angle_cpu_dispatch.h
angle_cuda_dispatch.h
angle native.h
```

```
angle_ops.h
any.h
any_compositeexplicitautogradnonfunctional_dispatch.h
any compositeexplicitautograd dispatch.h
any_compositeimplicitautograd_dispatch.h
any cpu dispatch.h
any_cuda_dispatch.h
any_meta.h
any_meta_dispatch.h
any_native.h
any ops.h
arange.h
arange compositeexplicitautograd dispatch.h
arange_cpu_dispatch.h
arange cuda dispatch.h
arange_meta_dispatch.h
arange native.h
arange_ops.h
arccos.h
arccosh.h
arccosh compositeimplicitautograd dispatch.h
arccosh_native.h
arccosh ops.h
\verb|arccos_compositeimplicitautograd_dispatch.h|
arccos_native.h
arccos ops.h
arcsin.h
arcsinh.h
\verb|arcsinh_compositeimplicitautograd_dispatch.h|
arcsinh native.h
arcsinh_ops.h
arcsin compositeimplicitautograd dispatch.h
arcsin_native.h
arcsin ops.h
arctan.h
arctan2.h
\verb|arctan2_composite implicit autograd_dispatch.h|
arctan2 native.h
arctan2_ops.h
arctanh.h
arctanh_compositeimplicitautograd_dispatch.h
arctanh_native.h
arctanh ops.h
\verb"arctan_composite implicit autograd_dispatch.h"
arctan native.h
arctan_ops.h
argmax.h
\verb|argmax_composite explicit autograd nonfunctional_dispatch.h|
argmax_cpu_dispatch.h
argmax_cuda_dispatch.h
argmax meta.h
```

```
argmax_meta_dispatch.h
argmax native.h
argmax_ops.h
argmin.h
argmin_compositeexplicitautogradnonfunctional_dispatch.h
argmin cpu dispatch.h
argmin_cuda_dispatch.h
argmin meta.h
argmin_meta_dispatch.h
argmin_native.h
argmin ops.h
argsort.h
argsort compositeimplicitautograd dispatch.h
argsort_native.h
argsort ops.h
argwhere.h
argwhere compositeimplicitautograd dispatch.h
argwhere_native.h
argwhere ops.h
asin.h
asinh.h
\verb|asinh_composite explicit autograd nonfunctional_dispatch.h|
asinh cpu dispatch.h
asinh_cuda_dispatch.h
asinh_meta.h
asinh meta dispatch.h
asinh_native.h
asinh ops.h
\verb"asin_composite explicit autograd nonfunctional_dispatch.h"
asin cpu dispatch.h
asin_cuda_dispatch.h
asin meta.h
asin_meta_dispatch.h
asin native.h
asin_ops.h
as strided.h
\verb|as_strided_composite explicit autograd nonfunctional_dispatch.h|
as strided copy.h
\verb|as_strided_copy_compositeexplicitautogradnonfunctional_dispatch.h|
as strided copy compositeexplicitautograd dispatch.h
as_strided_copy_native.h
as_strided_copy_ops.h
as_strided_cpu_dispatch.h
as_strided_cuda_dispatch.h
as strided meta dispatch.h
as_strided_native.h
as strided ops.h
as_strided_scatter.h
as strided scatter compositeexplicitautogradnonfunctional dispatch.h
as_strided_scatter_compositeexplicitautograd_dispatch.h
as strided scatter native.h
```

```
as_strided_scatter_ops.h
atan.h
atan2.h
atan2 compositeexplicitautogradnonfunctional dispatch.h
atan2_cpu_dispatch.h
atan2 cuda dispatch.h
atan2_meta.h
atan2 meta dispatch.h
atan2 native.h
atan2_ops.h
atanh.h
\verb|atanh_composite explicit autograd nonfunctional_dispatch.h|
atanh cpu dispatch.h
atanh_cuda_dispatch.h
atanh meta.h
atanh_meta_dispatch.h
atanh native.h
atanh_ops.h
atan compositeexplicitautogradnonfunctional dispatch.h
atan_cpu_dispatch.h
atan cuda dispatch.h
atan_meta.h
atan meta dispatch.h
atan_native.h
atan ops.h
atleast 1d.h
atleast_1d_compositeimplicitautograd_dispatch.h
atleast 1d native.h
atleast_1d_ops.h
atleast 2d.h
atleast_2d_compositeimplicitautograd_dispatch.h
atleast 2d native.h
atleast_2d_ops.h
atleast 3d.h
atleast_3d_compositeimplicitautograd_dispatch.h
atleast 3d native.h
atleast_3d_ops.h
avg poolld.h
{\tt avg\_poolld\_composite explicit autograd\_dispatch.h}
avg poolld compositeimplicitautograd dispatch.h
avg_pool1d_native.h
avg_pool1d_ops.h
avg_pool2d.h
avg_pool2d_backward.h
avg pool2d backward compositeexplicitautogradnonfunctional dispatch.h
avg_pool2d_backward_cpu_dispatch.h
avg_pool2d_backward_cuda_dispatch.h
avg_pool2d_backward_meta.h
avg pool2d backward meta dispatch.h
avg_pool2d_backward_native.h
avg pool2d backward ops.h
```

```
{\tt avg\_pool2d\_composite} explicit autograd nonfunctional\_dispatch.h
            avg pool2d cpu dispatch.h
            avg_pool2d_cuda_dispatch.h
            avg pool2d meta.h
            avg_pool2d_meta_dispatch.h
            avg pool2d native.h
            avg_pool2d_ops.h
            avg pool3d.h
            avg pool3d backward.h
            avg_pool3d_backward_compositeexplicitautogradnonfunctional_dispatch.h
            avg pool3d backward cpu dispatch.h
            avg_pool3d_backward_cuda_dispatch.h
            avg pool3d backward meta.h
            avg_pool3d_backward_meta_dispatch.h
            avg pool3d backward native.h
            avg_pool3d_backward_ops.h
            avg pool3d compositeexplicitautogradnonfunctional dispatch.h
            avg_pool3d_cpu_dispatch.h
            avg pool3d cuda dispatch.h
            avg_pool3d_meta.h
            avg pool3d meta dispatch.h
            avg_pool3d_native.h
            avg pool3d ops.h
            baddbmm.h
            baddbmm compositeexplicitautogradnonfunctional dispatch.h
            baddbmm cpu dispatch.h
            baddbmm_cuda_dispatch.h
            baddbmm meta.h
            baddbmm_meta_dispatch.h
            baddbmm native.h
            baddbmm_ops.h
            bartlett window.h
            bartlett_window_compositeexplicitautograd_dispatch.h
            bartlett window native.h
            bartlett_window_ops.h
            batch norm.h
            batch_norm_backward.h
            batch norm backward cpu dispatch.h
            batch_norm_backward_cuda_dispatch.h
            batch norm backward elemt.h
            \verb|batch_norm_backward_elemt_composite explicit autograd_dispatch.h|
            batch_norm_backward_elemt_cuda_dispatch.h
            batch_norm_backward_elemt_native.h
            batch_norm_backward_elemt_ops.h
            batch norm backward native.h
            batch_norm_backward_ops.h
            batch_norm_backward_reduce.h
            batch_norm_backward_reduce_compositeexplicitautograd_dispatch.h
1
            batch norm backward reduce cuda dispatch.h
            batch_norm_backward_reduce_native.h
            batch norm backward reduce ops.h
```

```
batch_norm_compositeimplicitautograd_dispatch.h
batch norm elemt.h
batch_norm_elemt_cuda_dispatch.h
batch norm elemt native.h
batch_norm_elemt_ops.h
batch norm gather stats.h
batch_norm_gather_stats_compositeexplicitautograd_dispatch.h
batch_norm_gather_stats_cuda_dispatch.h
batch_norm_gather_stats_native.h
batch_norm_gather_stats_ops.h
batch norm gather stats with counts.h
batch_norm_gather_stats_with_counts_compositeexplicitautograd_dispatch.h
batch norm gather stats with counts cuda dispatch.h
batch_norm_gather_stats_with_counts_native.h
batch norm gather stats with counts ops.h
batch_norm_native.h
batch norm ops.h
batch_norm_stats.h
batch norm stats compositeexplicitautograd dispatch.h
batch_norm_stats_cuda_dispatch.h
batch norm stats native.h
batch_norm_stats_ops.h
batch norm update stats.h
batch_norm_update_stats_compositeexplicitautograd_dispatch.h
batch_norm_update_stats_cpu_dispatch.h
batch norm update stats cuda dispatch.h
batch_norm_update_stats_native.h
batch norm update stats ops.h
bernoulli.h
bernoulli compositeexplicitautogradnonfunctional dispatch.h
bernoulli_compositeexplicitautograd_dispatch.h
bernoulli cpu dispatch.h
bernoulli_cuda_dispatch.h
bernoulli meta dispatch.h
bernoulli native.h
bernoulli ops.h
bilinear.h
bilinear compositeimplicitautograd dispatch.h
bilinear_native.h
bilinear ops.h
binary_cross_entropy.h
binary_cross_entropy_backward.h
binary_cross_entropy_backward_cpu_dispatch.h
binary_cross_entropy_backward_cuda_dispatch.h
binary cross entropy backward native.h
binary_cross_entropy_backward_ops.h
binary_cross_entropy_cpu_dispatch.h
binary_cross_entropy_cuda_dispatch.h
binary cross entropy native.h
binary_cross_entropy_ops.h
binary cross entropy with logits.h
```

```
\verb|binary_cross_entropy_with_logits_composite explicit autograd_dispatch.h|
            binary cross entropy with logits native.h
            binary_cross_entropy_with_logits_ops.h
            bincount.h
            bincount_compositeexplicitautograd_dispatch.h
            bincount cpu dispatch.h
            bincount_cuda_dispatch.h
            bincount native.h
            bincount ops.h
            binomial.h
            binomial compositeexplicitautograd dispatch.h
            binomial_cpu_dispatch.h
            binomial cuda dispatch.h
            binomial_native.h
            binomial ops.h
            bitwise_and.h
            bitwise and compositeexplicitautogradnonfunctional dispatch.h
            bitwise_and_compositeexplicitautograd_dispatch.h
            bitwise and cpu dispatch.h
            bitwise_and_cuda_dispatch.h
            bitwise and meta.h
            bitwise_and_meta_dispatch.h
            bitwise and native.h
            bitwise_and_ops.h
            bitwise left shift.h
            bitwise left shift compositeexplicitautogradnonfunctional dispatch.h
            \verb|bitwise_left_shift_composite explicit autograd_dispatch.h|
            bitwise left shift cpu dispatch.h
            bitwise_left_shift_cuda_dispatch.h
            bitwise left shift meta.h
            bitwise_left_shift_meta_dispatch.h
            bitwise_left_shift_native.h
            bitwise_left_shift_ops.h
            bitwise not.h
            \verb|bitwise_not_composite explicit autograd nonfunctional_dispatch.h|
            bitwise not cpu dispatch.h
            bitwise_not_cuda_dispatch.h
            bitwise not meta.h
            \verb|bitwise_not_meta_dispatch.h|
            bitwise not native.h
            bitwise_not_ops.h
            bitwise or.h
            bitwise_or_compositeexplicitautogradnonfunctional_dispatch.h
            \verb|bitwise_or_composite explicit autograd_dispatch.h|
            bitwise or cpu dispatch.h
            bitwise_or_cuda_dispatch.h
            bitwise or meta.h
            bitwise_or_meta_dispatch.h
1
            bitwise or native.h
            bitwise_or_ops.h
            bitwise right shift.h
```

```
\verb|bitwise_right_shift_composite explicit autograd nonfunctional_dispatch.h|
bitwise right shift compositeexplicitautograd dispatch.h
bitwise_right_shift_cpu_dispatch.h
bitwise right shift cuda dispatch.h
bitwise_right_shift_meta.h
bitwise right shift meta dispatch.h
bitwise_right_shift_native.h
bitwise right shift ops.h
bitwise_xor.h
\verb|bitwise_xor_composite explicit autograd nonfunctional_dispatch.h|
bitwise xor compositeexplicitautograd dispatch.h
bitwise_xor_cpu_dispatch.h
bitwise xor cuda dispatch.h
bitwise_xor_meta.h
bitwise xor meta dispatch.h
bitwise_xor_native.h
bitwise xor ops.h
blackman_window.h
blackman window compositeexplicitautograd dispatch.h
blackman_window_native.h
blackman window ops.h
block_diag.h
block diag compositeexplicitautograd dispatch.h
block_diag_native.h
block diag ops.h
bmm.h
\verb|bmm_composite explicit autograd nonfunctional_dispatch.h|
bmm cpu dispatch.h
bmm_cuda_dispatch.h
bmm meta.h
bmm_meta_dispatch.h
bmm native.h
bmm_ops.h
broadcast tensors.h
broadcast_tensors_compositeimplicitautograd_dispatch.h
broadcast tensors native.h
broadcast_tensors_ops.h
broadcast to.h
\verb|broadcast_to_composite implicit autograd_dispatch.h|
broadcast to native.h
broadcast_to_ops.h
bucketize.h
bucketize_compositeexplicitautograd_dispatch.h
bucketize_cpu_dispatch.h
bucketize cuda dispatch.h
bucketize_native.h
bucketize ops.h
can_cast.h
can cast compositeimplicitautograd dispatch.h
can_cast_native.h
can cast ops.h
```

```
cartesian_prod.h
            cartesian prod compositeimplicitautograd dispatch.h
            cartesian_prod_native.h
            cartesian prod ops.h
            cat.h
            cat compositeexplicitautogradnonfunctional dispatch.h
            \verb|cat_composite implicit autograd_dispatch.h|
            cat cpu dispatch.h
            cat cuda dispatch.h
            cat_meta.h
            cat meta dispatch.h
            cat_native.h
            cat ops.h
            cauchy.h
            cauchy compositeexplicitautograd dispatch.h
            cauchy_cpu_dispatch.h
            cauchy cuda dispatch.h
            cauchy_meta_dispatch.h
            cauchy native.h
            cauchy_ops.h
            ccol indices.h
            \verb|ccol_indices_composite explicit autograd_dispatch.h|
            ccol indices copy.h
            \verb|ccol_indices_copy_compositeexplicit autograd nonfunctional_dispatch.h|
            ccol indices copy compositeexplicitautograd dispatch.h
            ccol indices copy native.h
            ccol_indices_copy_ops.h
            ccol indices native.h
            ccol_indices_ops.h
            cdist.h
            \verb|cdist_compositeimplicitautograd_dispatch.h|\\
            cdist native.h
            cdist_ops.h
            ceil.h
            ceil_compositeexplicitautogradnonfunctional_dispatch.h
            ceil cpu dispatch.h
            ceil_cuda_dispatch.h
            ceil meta.h
            ceil_meta_dispatch.h
            ceil native.h
            ceil_ops.h
            celu.h
            celu_compositeexplicitautograd_dispatch.h
            celu_native.h
            celu ops.h
            chain_matmul.h
            chain_matmul_compositeimplicitautograd_dispatch.h
            chain_matmul_native.h
-
            chain matmul ops.h
            chalf.h
            chalf compositeimplicitautograd dispatch.h
```

```
chalf_native.h
            chalf ops.h
            channel_shuffle.h
            channel shuffle compositeexplicitautograd dispatch.h
            channel_shuffle_cpu_dispatch.h
            channel shuffle cuda dispatch.h
            channel_shuffle_native.h
            channel shuffle ops.h
            cholesky.h
            cholesky_cpu_dispatch.h
            cholesky_cuda_dispatch.h
            cholesky_inverse.h
            cholesky_inverse_cpu_dispatch.h
            cholesky_inverse_cuda_dispatch.h
            cholesky inverse native.h
            cholesky_inverse_ops.h
            cholesky native.h
            cholesky_ops.h
            cholesky solve.h
            cholesky_solve_compositeexplicitautograd_dispatch.h
            cholesky solve native.h
            cholesky_solve_ops.h
            choose qparams optimized.h
            \verb|choose_qparams_optimized_composite implicit autograd_dispatch.h|
            choose qparams optimized native.h
            choose_qparams_optimized_ops.h
            chunk.h
            chunk compositeimplicitautograd dispatch.h
            chunk_native.h
            chunk ops.h
            clamp.h
            clamp compositeexplicitautogradnonfunctional dispatch.h
            clamp_cpu_dispatch.h
            clamp cuda dispatch.h
            clamp_max.h
            clamp max compositeexplicitautogradnonfunctional dispatch.h
            clamp_max_cpu_dispatch.h
            clamp max cuda dispatch.h
            clamp_max_meta.h
            clamp max meta dispatch.h
            clamp_max_native.h
            clamp_max_ops.h
            clamp_meta.h
            clamp_meta_dispatch.h
            clamp min.h
            \verb|clamp_min_composite explicit autograd nonfunctional_dispatch.h|
            clamp_min_cpu_dispatch.h
            clamp_min_cuda_dispatch.h
1
            clamp min meta.h
            clamp_min_meta_dispatch.h
            clamp min native.h
```

```
clamp_min_ops.h
clamp native.h
clamp_ops.h
clip.h
clip_compositeimplicitautograd_dispatch.h
clip native.h
clip_ops.h
clone.h
{\tt clone\_composite explicit autograd\_dispatch.h}
clone_native.h
clone ops.h
coalesce.h
coalesce compositeimplicitautograd dispatch.h
coalesce_native.h
coalesce ops.h
col2im.h
col2im cpu dispatch.h
col2im_cuda_dispatch.h
col2im native.h
col2im_ops.h
column stack.h
\verb|column_stack_composite implicit autograd_dispatch.h|
column stack native.h
column_stack_ops.h
col indices.h
col_indices_compositeexplicitautograd_dispatch.h
col_indices_copy.h
col indices copy compositeexplicitautogradnonfunctional dispatch.h
\verb|col_indices_copy_compositeexplicit autograd_dispatch.h|
col indices copy native.h
col_indices_copy_ops.h
col indices native.h
col_indices_ops.h
combinations.h
combinations_compositeimplicitautograd_dispatch.h
combinations native.h
combinations_ops.h
complex.h
{\tt complex\_composite explicit autograd\_dispatch.h}
complex cpu dispatch.h
complex_cuda_dispatch.h
complex_native.h
complex_ops.h
concat.h
concatenate.h
\verb|concatenate_composite| implicit autograd_dispatch.h|
concatenate native.h
concatenate_ops.h
concat compositeimplicitautograd dispatch.h
concat_native.h
concat ops.h
```

```
conj.h
conj compositeimplicitautograd dispatch.h
conj native.h
conj ops.h
conj_physical.h
conj physical compositeexplicitautograd dispatch.h
conj_physical_compositeimplicitautograd_dispatch.h
conj physical cpu dispatch.h
conj_physical_cuda_dispatch.h
conj_physical_native.h
conj physical ops.h
constant_pad_nd.h
constant pad nd compositeexplicitautograd dispatch.h
constant_pad_nd_native.h
constant_pad_nd_ops.h
contiguous.h
contiguous compositeimplicitautograd dispatch.h
contiguous_native.h
contiguous ops.h
convld.h
convld compositeimplicitautograd dispatch.h
convld_native.h
convld ops.h
conv2d.h
conv2d compositeimplicitautograd dispatch.h
conv2d_native.h
conv2d_ops.h
conv3d.h
\verb|conv3d_compositeimplicitautograd_dispatch.h| \\
conv3d native.h
conv3d_ops.h
convolution.h
convolution_backward.h
convolution backward compositeexplicitautograd dispatch.h
convolution_backward_cuda_dispatch.h
convolution backward native.h
convolution_backward_ops.h
convolution backward overrideable.h
\verb|convolution_backward_overrideable_composite explicit autograd_dispatch.h|
convolution backward overrideable native.h
convolution_backward_overrideable_ops.h
convolution_compositeexplicitautograd_dispatch.h
convolution_native.h
convolution ops.h
convolution overrideable.h
\verb|convolution_overrideable_composite explicit autograd_dispatch.h|
convolution_overrideable_native.h
convolution_overrideable_ops.h
conv depthwise3d.h
conv_depthwise3d_compositeexplicitautograd_dispatch.h
conv depthwise3d cuda dispatch.h
```

```
conv_depthwise3d_native.h
conv depthwise3d ops.h
conv_tbc.h
conv tbc backward.h
conv_tbc_backward_compositeimplicitautograd_dispatch.h
conv tbc backward native.h
conv_tbc_backward_ops.h
conv tbc compositeexplicitautograd dispatch.h
conv_tbc_native.h
conv_tbc_ops.h
conv transposeld.h
\verb|conv_transpose| = \texttt|d_composite implicit autograd_dispatch.h|
conv transposeld native.h
conv_transposeld_ops.h
conv transpose2d.h
\verb|conv_transpose2d_composite implicit autograd_dispatch.h| \\
conv transpose2d native.h
conv_transpose2d_ops.h
conv transpose3d.h
conv_transpose3d_compositeimplicitautograd_dispatch.h
conv transpose3d native.h
conv_transpose3d_ops.h
copy.h
copysign.h
copysign compositeexplicitautogradnonfunctional dispatch.h
copysign_compositeexplicitautograd_dispatch.h
copysign_cpu_dispatch.h
copysign_cuda_dispatch.h
copysign_meta.h
copysign meta dispatch.h
copysign_native.h
copysign ops.h
\verb|copy_composite explicit autograd nonfunctional_dispatch.h|
copy compositeexplicitautograd dispatch.h
copy_meta_dispatch.h
copy native.h
copy_ops.h
copy sparse to sparse.h
\verb|copy_sparse_to_sparse_composite explicit autograd_dispatch.h|
copy sparse to sparse meta dispatch.h
copy_sparse_to_sparse_native.h
copy_sparse_to_sparse_ops.h
corrcoef.h
\verb|corrcoef_compositeimplicitautograd_dispatch.h|
corrcoef native.h
corrcoef_ops.h
cos.h
cosh.h
cosh compositeexplicitautogradnonfunctional dispatch.h
cosh_cpu_dispatch.h
cosh cuda dispatch.h
```

```
cosh_meta.h
cosh meta dispatch.h
cosh_native.h
cosh ops.h
cosine_embedding_loss.h
cosine embedding loss compositeimplicitautograd dispatch.h
cosine_embedding_loss_native.h
cosine embedding loss ops.h
cosine similarity.h
cosine_similarity_compositeimplicitautograd_dispatch.h
cosine similarity native.h
cosine_similarity_ops.h
cos compositeexplicitautogradnonfunctional dispatch.h
cos_cpu_dispatch.h
cos cuda dispatch.h
cos_meta.h
cos_meta_dispatch.h
cos_native.h
cos ops.h
count_nonzero.h
count nonzero compositeexplicitautograd dispatch.h
count_nonzero_cpu_dispatch.h
count nonzero cuda dispatch.h
count_nonzero_native.h
count nonzero ops.h
cov.h
\verb"cov_composite implicit autograd_dispatch.h"
cov native.h
cov_ops.h
cross.h
cross_compositeimplicitautograd_dispatch.h
cross entropy loss.h
cross_entropy_loss_compositeimplicitautograd_dispatch.h
cross_entropy_loss_native.h
cross_entropy_loss_ops.h
cross native.h
cross_ops.h
crow indices.h
\verb|crow_indices_compositeexplicitautograd_dispatch.h|
crow indices copy.h
\verb|crow_indices_copy_compositeexplicit autograd nonfunctional_dispatch.h|
crow_indices_copy_compositeexplicitautograd_dispatch.h
crow_indices_copy_native.h
crow_indices_copy_ops.h
crow indices native.h
crow_indices_ops.h
ctc loss.h
ctc_loss_compositeimplicitautograd_dispatch.h
ctc loss native.h
ctc_loss_ops.h
cudnn affine grid generator.h
```

```
cudnn_affine_grid_generator_backward.h
                    cudnn affine grid generator backward compositeexplicitautograd dispatch.h
                    cudnn_affine_grid_generator_backward_cuda_dispatch.h
                    cudnn affine grid generator backward native.h
                    cudnn_affine_grid_generator_backward_ops.h
                    cudnn affine grid generator compositeexplicitautograd dispatch.h
                    cudnn_affine_grid_generator_cuda_dispatch.h
                    cudnn affine grid generator native.h
                    cudnn_affine_grid_generator_ops.h
                    cudnn_batch_norm.h
                    cudnn batch norm backward.h
                    cudnn_batch_norm_backward_compositeexplicitautograd_dispatch.h
                    cudnn batch norm backward cuda dispatch.h
                    cudnn_batch_norm_backward_native.h
                    cudnn batch norm backward ops.h
                    cudnn_batch_norm_compositeexplicitautograd_dispatch.h
                    cudnn batch norm cuda dispatch.h
                    cudnn_batch_norm_native.h
                    cudnn batch norm ops.h
                    cudnn convolution.h
                    cudnn convolution add relu.h
                    cudnn_convolution_add_relu_compositeexplicitautograd_dispatch.h
                    cudnn convolution add relu cuda dispatch.h
                    cudnn_convolution_add_relu_native.h
                    cudnn convolution add relu ops.h
                    cudnn_convolution_cuda_dispatch.h
                    cudnn convolution native.h
                    cudnn convolution ops.h
                    cudnn_convolution_relu.h
                    cudnn convolution relu compositeexplicitautograd dispatch.h
                    cudnn_convolution_relu_cuda_dispatch.h
                    cudnn convolution relu native.h
                    cudnn_convolution_relu_ops.h
                    cudnn convolution transpose.h
                    cudnn_convolution_transpose_compositeexplicitautograd_dispatch.h
                    cudnn convolution transpose cuda dispatch.h
                    cudnn_convolution_transpose_native.h
                    cudnn convolution transpose ops.h
                    cudnn_grid_sampler.h
                    cudnn grid sampler backward.h
                    cudnn_grid_sampler_backward_compositeexplicitautograd_dispatch.h
                    cudnn_grid_sampler_backward_cuda_dispatch.h
                    cudnn_grid_sampler_backward_native.h
                    cudnn_grid_sampler_backward_ops.h
                    cudnn grid sampler compositeexplicitautograd dispatch.h
                    cudnn_grid_sampler_cuda_dispatch.h
                    cudnn grid sampler native.h
                    cudnn_grid_sampler_ops.h
        1
                    cudnn is acceptable.h
1
                    cudnn_is_acceptable_compositeimplicitautograd_dispatch.h
                    cudnn is acceptable native.h
```

```
cudnn_is_acceptable_ops.h
            cummax.h
            cummaxmin_backward.h
            cummaxmin backward compositeimplicitautograd dispatch.h
            cummaxmin_backward_native.h
            cummaxmin backward ops.h
            \verb|cummax_compositeexplicitautograd_dispatch.h|
            cummax compositeimplicitautograd dispatch.h
            cummax_native.h
            cummax ops.h
            cummin.h
            \verb|cummin_composite explicit autograd_dispatch.h|
            cummin_compositeimplicitautograd_dispatch.h
            cummin_native.h
            cummin ops.h
            cumprod.h
            cumprod backward.h
            cumprod_backward_compositeimplicitautograd_dispatch.h
            cumprod backward native.h
            cumprod_backward_ops.h
            cumprod compositeexplicitautogradnonfunctional dispatch.h
            \verb|cumprod_compositeimplicitautograd_dispatch.h|
            cumprod cpu dispatch.h
            cumprod_cuda_dispatch.h
            cumprod meta.h
            cumprod_meta_dispatch.h
            cumprod_native.h
            cumprod ops.h
            cumsum.h
            cumsum compositeexplicitautogradnonfunctional dispatch.h
            cumsum_compositeimplicitautograd_dispatch.h
            cumsum cpu dispatch.h
            cumsum_cuda_dispatch.h
            cumsum meta.h
            cumsum_meta_dispatch.h
            cumsum native.h
            cumsum_ops.h
            cumulative trapezoid.h
            \verb|cumulative_trapezoid_composite implicit autograd_dispatch.h|
            cumulative trapezoid native.h
            cumulative_trapezoid_ops.h
            data.h
            data_compositeimplicitautograd_dispatch.h
            data native.h
            data_ops.h
            deg2rad.h
            deg2rad compositeexplicitautograd dispatch.h
            deg2rad_native.h
1
            deg2rad ops.h
            dense_dim.h
            dense dim compositeexplicitautograd dispatch.h
```

```
dense_dim_native.h
dense dim ops.h
dequantize.h
dequantize compositeexplicitautograd dispatch.h
dequantize_cpu_dispatch.h
dequantize cuda dispatch.h
dequantize_native.h
dequantize_ops.h
det.h
detach.h
detach compositeexplicitautograd dispatch.h
detach_copy.h
detach copy compositeexplicitautogradnonfunctional dispatch.h
detach_copy_compositeexplicitautograd_dispatch.h
detach copy native.h
detach_copy_ops.h
detach native.h
detach_ops.h
det compositeimplicitautograd dispatch.h
det native.h
det ops.h
diag.h
diagflat.h
diagflat_compositeimplicitautograd_dispatch.h
diagflat native.h
diagflat ops.h
diagonal.h
diagonal backward.h
diagonal_backward_compositeexplicitautograd_dispatch.h
diagonal backward native.h
diagonal_backward_ops.h
diagonal compositeexplicitautograd dispatch.h
diagonal_compositeimplicitautograd_dispatch.h
diagonal copy.h
diagonal_copy_compositeexplicitautogradnonfunctional_dispatch.h
diagonal copy compositeexplicitautograd dispatch.h
diagonal_copy_native.h
diagonal copy ops.h
diagonal_native.h
diagonal ops.h
diagonal_scatter.h
\verb|diagonal_scatter_composite explicit autograd nonfunctional_dispatch.h|
diagonal scatter compositeexplicitautograd dispatch.h
diagonal_scatter_native.h
diagonal scatter ops.h
diag_compositeimplicitautograd_dispatch.h
diag embed.h
\verb|diag_embed_composite explicit autograd nonfunctional_dispatch.h|
diag embed compositeexplicitautograd dispatch.h
diag_embed_native.h
diag embed ops.h
```

```
diag_native.h
            diag ops.h
            diff.h
            diff compositeimplicitautograd dispatch.h
            diff_native.h
            diff ops.h
            digamma.h
            digamma_compositeexplicitautogradnonfunctional_dispatch.h
            digamma_cpu_dispatch.h
            digamma_cuda_dispatch.h
            digamma meta.h
            digamma_meta_dispatch.h
            digamma native.h
            digamma_ops.h
            dist.h
            \verb|dist_composite explicit autograd_dispatch.h|
            dist native.h
            dist_ops.h
            div.h
            divide.h
            divide compositeimplicitautograd dispatch.h
            divide_native.h
            divide ops.h
            \verb"div_composite explicit autograd non functional_dispatch.h"
            div_compositeexplicitautograd_dispatch.h
            div cpu dispatch.h
            div_cuda_dispatch.h
            div meta.h
            div_meta_dispatch.h
            div native.h
            div_ops.h
            \verb"dot_composite explicit autograd_dispatch.h"
            dot cpu dispatch.h
            dot_cuda_dispatch.h
            dot native.h
            dot_ops.h
            dropout.h
            {\tt dropout\_compositeimplicitautograd\_dispatch.h}
            dropout native.h
            dropout_ops.h
            dsplit.h
            dsplit_compositeimplicitautograd_dispatch.h
            dsplit_native.h
            dsplit ops.h
            dstack.h
            dstack compositeimplicitautograd dispatch.h
            dstack_native.h
1
            dstack ops.h
            einsum.h
            einsum compositeimplicitautograd dispatch.h
```

```
einsum_native.h
            einsum ops.h
            elu.h
            elu backward.h
            elu_backward_compositeexplicitautogradnonfunctional_dispatch.h
            elu backward cpu dispatch.h
            elu_backward_cuda_dispatch.h
            elu backward meta.h
            elu_backward_meta_dispatch.h
            elu_backward_native.h
            elu backward ops.h
            \verb|elu_composite explicit autograd nonfunctional_dispatch.h|
            elu cpu dispatch.h
            elu_cuda_dispatch.h
            elu meta.h
            elu_meta_dispatch.h
            elu native.h
            elu_ops.h
            embedding.h
            embedding_backward.h
            embedding backward compositeimplicitautograd dispatch.h
            embedding_backward_native.h
            embedding backward ops.h
            embedding_bag.h
            embedding bag compositeimplicitautograd dispatch.h
            embedding bag native.h
            embedding_bag_ops.h
            embedding compositeexplicitautograd dispatch.h
            embedding_dense_backward.h
            embedding dense backward compositeexplicitautograd dispatch.h
            embedding_dense_backward_cpu_dispatch.h
            embedding dense backward cuda dispatch.h
            embedding_dense_backward_native.h
            embedding dense backward ops.h
            embedding_native.h
            embedding ops.h
            embedding_renorm.h
            embedding renorm compositeexplicitautograd dispatch.h
            embedding_renorm_cpu_dispatch.h
            embedding renorm cuda dispatch.h
            embedding_renorm_meta_dispatch.h
            embedding_renorm_native.h
            embedding_renorm_ops.h
            {\tt embedding\_sparse\_backward.h}
            embedding sparse backward compositeimplicitautograd dispatch.h
            embedding_sparse_backward_native.h
            embedding_sparse_backward_ops.h
1
            empty compositeexplicitautograd dispatch.h
            empty_compositeimplicitautograd_dispatch.h
            empty cpu dispatch.h
```

```
empty_cuda_dispatch.h
empty like.h
empty_like_compositeexplicitautograd_dispatch.h
empty like native.h
empty_like_ops.h
empty meta dispatch.h
empty_native.h
empty ops.h
empty permuted.h
empty_permuted_compositeexplicitautograd_dispatch.h
empty permuted native.h
empty_permuted_ops.h
empty quantized.h
\verb"empty_quantized_composite explicit autograd_dispatch.h"
empty_quantized_native.h
empty_quantized_ops.h
empty strided.h
empty_strided_compositeexplicitautograd_dispatch.h
empty strided cpu dispatch.h
empty_strided_cuda_dispatch.h
empty strided meta dispatch.h
empty_strided_native.h
empty strided ops.h
eq.h
equal.h
equal cpu dispatch.h
equal_cuda_dispatch.h
equal native.h
equal_ops.h
eq compositeexplicitautogradnonfunctional dispatch.h
eq_cpu_dispatch.h
eq cuda dispatch.h
eq_meta.h
eq_meta_dispatch.h
eq native.h
eq ops.h
erf.h
erfc.h
\verb|erfc_composite explicit autograd nonfunctional_dispatch.h|
erfc cpu dispatch.h
erfc_cuda_dispatch.h
erfc meta.h
erfc_meta_dispatch.h
erfc_native.h
erfc ops.h
erfinv.h
erfinv_compositeexplicitautogradnonfunctional_dispatch.h
erfinv_cpu_dispatch.h
erfinv cuda dispatch.h
erfinv_meta.h
erfinv meta dispatch.h
```

```
erfinv_native.h
            erfinv ops.h
            erf_compositeexplicitautogradnonfunctional_dispatch.h
            erf cpu dispatch.h
            erf_cuda_dispatch.h
            erf meta.h
            erf_meta_dispatch.h
            erf_native.h
            erf ops.h
            exp.h
            exp2.h
            \verb|exp2_composite explicit autograd nonfunctional_dispatch.h|
            exp2 cpu dispatch.h
            exp2_cuda_dispatch.h
            exp2 meta.h
            exp2_meta_dispatch.h
            exp2 native.h
            exp2_ops.h
            expand.h
            expand_as.h
            expand as compositeimplicitautograd dispatch.h
            expand_as_native.h
            expand as ops.h
            \verb|expand_compositeexplicitautograd_dispatch.h|
            expand_copy.h
            expand copy compositeexplicitautogradnonfunctional dispatch.h
            \verb|expand_copy_compositeexplicitautograd_dispatch.h|
            expand copy native.h
            expand_copy_ops.h
            expand native.h
            expand_ops.h
            expm1_compositeexplicitautogradnonfunctional_dispatch.h
            expm1 cpu dispatch.h
            expm1_cuda_dispatch.h
            expm1 meta.h
            expml_meta_dispatch.h
            expml native.h
            expm1_ops.h
            exponential.h
            exponential_compositeexplicitautograd_dispatch.h
            exponential_cpu_dispatch.h
            exponential cuda dispatch.h
            exponential_meta_dispatch.h
            exponential native.h
            exponential_ops.h
            exp_compositeexplicitautogradnonfunctional_dispatch.h
            exp_cpu_dispatch.h
1
            exp cuda dispatch.h
            exp_meta.h
            exp meta dispatch.h
```

```
exp_native.h
exp ops.h
eve.h
eye compositeexplicitautograd dispatch.h
eye_cpu_dispatch.h
eye cuda dispatch.h
eye_meta_dispatch.h
eye native.h
eye ops.h
fake_quantize_per_channel_affine.h
fake quantize per channel affine cachemask.h
fake_quantize_per_channel_affine_cachemask_backward.h
fake_quantize_per_channel_affine_cachemask_backward_compositeimplicitautograd dispatch.h
fake_quantize_per_channel_affine_cachemask_backward_native.h
fake quantize per channel affine cachemask backward ops.h
fake_quantize_per_channel_affine_cachemask_compositeexplicitautograd_dispatch.h
fake quantize per channel affine cachemask cpu dispatch.h
fake_quantize_per_channel_affine_cachemask_cuda_dispatch.h
fake quantize per channel affine cachemask native.h
fake_quantize_per_channel_affine_cachemask_ops.h
fake quantize per channel affine compositeimplicitautograd dispatch.h
fake_quantize_per_channel_affine_native.h
fake quantize per channel affine ops.h
fake_quantize_per_tensor_affine.h
fake quantize per tensor affine cachemask.h
fake quantize per tensor affine cachemask backward.h
fake_quantize_per_tensor_affine_cachemask_backward_compositeimplicitautograd_dispatch.h
fake quantize per tensor affine cachemask backward native.h
fake_quantize_per_tensor_affine_cachemask_backward_ops.h
fake quantize per tensor affine cachemask compositeexplicitautograd dispatch.h
fake_quantize_per_tensor_affine_cachemask_cpu_dispatch.h
fake quantize per tensor affine cachemask cuda dispatch.h
fake_quantize_per_tensor_affine_cachemask_native.h
fake quantize per tensor affine cachemask ops.h
fake_quantize_per_tensor_affine_compositeimplicitautograd_dispatch.h
fake quantize per tensor affine native.h
fake_quantize_per_tensor_affine_ops.h
fbgemm linear fp16 weight.h
fbgemm_linear_fp16_weight_compositeimplicitautograd_dispatch.h
fbgemm linear fp16 weight fp32 activation.h
fbgemm_linear_fp16_weight_fp32_activation_compositeimplicitautograd_dispatch.h
fbgemm_linear_fp16_weight_fp32_activation_native.h
fbgemm_linear_fp16_weight_fp32_activation_ops.h
fbgemm_linear_fp16_weight_native.h
fbgemm linear fp16 weight ops.h
fbgemm_linear_int8_weight.h
fbgemm_linear_int8_weight_compositeimplicitautograd_dispatch.h
fbgemm_linear_int8_weight_fp32_activation.h
fbgemm linear int8 weight fp32 activation compositeimplicitautograd dispatch.h
fbgemm_linear_int8_weight_fp32_activation_native.h
```

fbgemm linear int8 weight fp32 activation ops.h

```
fbgemm_linear_int8_weight_native.h
fbgemm linear int8 weight ops.h
fbgemm_linear_quantize_weight.h
fbgemm linear quantize weight compositeimplicitautograd dispatch.h
fbgemm_linear_quantize_weight_native.h
fbgemm linear quantize weight ops.h
fbgemm_pack_gemm_matrix_fp16.h
fbgemm pack gemm matrix fp16 compositeimplicitautograd dispatch.h
fbgemm_pack_gemm_matrix_fp16_native.h
fbgemm_pack_gemm_matrix_fp16_ops.h
fbgemm pack quantized matrix.h
\verb|fbgemm_pack_quantized_matrix_composite implicit autograd_dispatch.h|
fbgemm pack quantized matrix native.h
fbgemm_pack_quantized_matrix_ops.h
feature alpha dropout.h
feature_alpha_dropout_compositeimplicitautograd_dispatch.h
feature alpha dropout native.h
feature_alpha_dropout_ops.h
feature dropout.h
feature_dropout_compositeimplicitautograd_dispatch.h
feature dropout native.h
feature_dropout_ops.h
fft fft.h
fft_fft2.h
fft fft2 compositeimplicitautograd dispatch.h
fft fft2 native.h
fft_fft2_ops.h
fft fftfreq.h
fft_fftfreq_compositeexplicitautograd_dispatch.h
fft fftfreq native.h
fft_fftfreq_ops.h
fft fftn.h
fft_fftn_compositeimplicitautograd_dispatch.h
fft fftn native.h
fft_fftn_ops.h
fft fftshift.h
{\tt fft\_fftshift\_compositeimplicitautograd\_dispatch.h}
fft fftshift native.h
fft_fftshift_ops.h
fft fft compositeimplicitautograd dispatch.h
fft_fft_native.h
fft_fft_ops.h
fft hfft.h
fft hfft2.h
fft hfft2 compositeimplicitautograd dispatch.h
fft_hfft2_native.h
fft hfft2 ops.h
fft_hfftn.h
fft hfftn compositeimplicitautograd dispatch.h
fft_hfftn_native.h
fft hfftn ops.h
```

```
fft_hfft_compositeimplicitautograd_dispatch.h
                                fft hfft native.h
                                fft_hfft_ops.h
                   - 1
                                fft ifft.h
                                fft_ifft2.h
                                fft ifft2 compositeimplicitautograd dispatch.h
                                fft_ifft2_native.h
                                fft ifft2 ops.h
                                fft ifftn.h
                                fft_ifftn_compositeimplicitautograd_dispatch.h
                                fft ifftn native.h
                                fft_ifftn_ops.h
                                fft ifftshift.h
                                {\tt fft\_ifftshift\_compositeimplicitautograd\_dispatch.h}
                                fft ifftshift native.h
                                fft_ifftshift_ops.h
                                fft_ifft_compositeimplicitautograd_dispatch.h
Ī
                                fft_ifft_native.h
                                fft ifft ops.h
                                fft_ihfft.h
                                fft ihfft2.h
                                {\tt fft\_ihfft2\_compositeimplicitautograd\_dispatch.h}
                                fft ihfft2 native.h
                                fft_ihfft2_ops.h
                                fft ihfftn.h
                                fft ihfftn compositeimplicitautograd dispatch.h
                                fft_ihfftn_native.h
                                fft ihfftn ops.h
                                fft_ihfft_compositeimplicitautograd_dispatch.h
                                fft ihfft native.h
                                fft_ihfft_ops.h
                                fft irfft.h
                                fft_irfft2.h
                                fft irfft2 compositeimplicitautograd dispatch.h
                                fft_irfft2_native.h
                                fft irfft2 ops.h
                                fft_irfftn.h
                                fft irfftn compositeimplicitautograd dispatch.h
                                fft_irfftn_native.h
                                fft irfftn ops.h
                                fft_irfft_compositeimplicitautograd_dispatch.h
                                fft_irfft_native.h
                                fft_irfft_ops.h
                                fft_rfft.h
                                fft rfft2.h
                                {\tt fft\_rfft2\_compositeimplicitautograd\_dispatch.h}
Ī
                                fft_rfft2_native.h
                                fft_rfft2_ops.h
            fft rfftfreq.h
                                fft_rfftfreq_compositeexplicitautograd_dispatch.h
                                fft rfftfreq native.h
```

```
fft_rfftfreq_ops.h
            fft rfftn.h
            fft_rfftn_compositeimplicitautograd_dispatch.h
            fft rfftn native.h
            fft_rfftn_ops.h
            fft rfft compositeimplicitautograd dispatch.h
            fft_rfft_native.h
            fft rfft ops.h
            fill.h
            fill_compositeexplicitautograd_dispatch.h
            fill cpu dispatch.h
            fill_cuda_dispatch.h
            fill diagonal.h
            \verb|fill_diagonal_composite implicit autograd_dispatch.h|
            fill diagonal native.h
            fill_diagonal_ops.h
            fill meta dispatch.h
            fill_native.h
            fill ops.h
            fix.h
            fix compositeimplicitautograd dispatch.h
            fix_native.h
            fix ops.h
            flatten.h
            flatten_compositeimplicitautograd_dispatch.h
            flatten dense tensors.h
            {\tt flatten\_dense\_tensors\_compositeimplicitautograd\_dispatch.h}
            flatten dense tensors native.h
            flatten_dense_tensors_ops.h
            flatten native.h
            flatten_ops.h
            flip.h
            fliplr.h
            fliplr compositeimplicitautograd dispatch.h
            fliplr_native.h
            fliplr ops.h
            flipud.h
            flipud compositeimplicitautograd dispatch.h
            flipud_native.h
            flipud ops.h
            \verb|flip_composite explicit autograd_dispatch.h|
            flip_cpu_dispatch.h
            flip_cuda_dispatch.h
            flip_native.h
            flip ops.h
            float_power.h
            float_power_compositeimplicitautograd_dispatch.h
            float_power_native.h
-
            float power ops.h
            floor.h
            floor compositeexplicitautogradnonfunctional dispatch.h
```

```
floor_cpu_dispatch.h
floor cuda dispatch.h
floor divide.h
floor divide compositeexplicitautograd dispatch.h
floor_divide_cpu_dispatch.h
floor divide cuda dispatch.h
floor_divide_meta_dispatch.h
floor divide native.h
floor_divide_ops.h
floor_meta.h
floor meta dispatch.h
floor_native.h
floor ops.h
fmax.h
fmax compositeexplicitautogradnonfunctional dispatch.h
fmax_cpu_dispatch.h
fmax cuda dispatch.h
fmax_meta.h
fmax meta dispatch.h
fmax_native.h
fmax ops.h
fmin.h
fmin compositeexplicitautogradnonfunctional dispatch.h
fmin_cpu_dispatch.h
fmin cuda dispatch.h
fmin meta.h
fmin_meta_dispatch.h
fmin native.h
fmin_ops.h
fmod.h
fmod_compositeexplicitautogradnonfunctional_dispatch.h
fmod compositeexplicitautograd dispatch.h
fmod_cpu_dispatch.h
fmod cuda dispatch.h
fmod_meta.h
fmod meta dispatch.h
fmod_native.h
fmod ops.h
frac.h
fractional max pool2d.h
fractional_max_pool2d_backward.h
fractional_max_pool2d_backward_compositeexplicitautogradnonfunctional_dispatch.h
fractional_max_pool2d_backward_cpu_dispatch.h
fractional_max_pool2d_backward_cuda_dispatch.h
fractional max pool2d backward meta.h
fractional_max_pool2d_backward_meta_dispatch.h
fractional_max_pool2d_backward_native.h
fractional_max_pool2d_backward_ops.h
fractional max pool2d compositeexplicitautogradnonfunctional dispatch.h
fractional_max_pool2d_cpu_dispatch.h
fractional max pool2d cuda dispatch.h
```

```
fractional_max_pool2d_meta.h
fractional max pool2d meta dispatch.h
fractional_max_pool2d_native.h
fractional max pool2d ops.h
fractional_max_pool3d.h
fractional max pool3d backward.h
fractional_max_pool3d_backward_cpu_dispatch.h
fractional max pool3d backward cuda dispatch.h
fractional_max_pool3d_backward_native.h
fractional_max_pool3d_backward_ops.h
fractional max pool3d compositeexplicitautogradnonfunctional dispatch.h
fractional_max_pool3d_cpu_dispatch.h
fractional max pool3d cuda dispatch.h
fractional_max_pool3d_meta.h
fractional max pool3d meta dispatch.h
fractional_max_pool3d_native.h
fractional max pool3d ops.h
frac_compositeexplicitautogradnonfunctional_dispatch.h
frac cpu dispatch.h
frac_cuda_dispatch.h
frac meta.h
frac_meta_dispatch.h
frac native.h
frac_ops.h
frexp.h
frexp_compositeexplicitautograd_dispatch.h
frexp_cpu_dispatch.h
frexp cuda dispatch.h
frexp_native.h
frexp ops.h
frobenius_norm.h
frobenius_norm_compositeimplicitautograd_dispatch.h
frobenius_norm_native.h
frobenius norm ops.h
from_blob.h
from file.h
from_file_compositeexplicitautograd_dispatch.h
from file cpu dispatch.h
from_file_native.h
from file ops.h
full.h
full_compositeexplicitautograd_dispatch.h
full_like.h
full_like_compositeexplicitautograd_dispatch.h
full like native.h
full_like_ops.h
full native.h
full_ops.h
fused_moving_avg_obs_fake_quant.h
fused_moving_avg_obs_fake_quant_compositeimplicitautograd_dispatch.h
fused_moving_avg_obs_fake_quant_native.h
```

```
fused_moving_avg_obs_fake_quant_ops.h
gather.h
gather_backward.h
gather backward compositeimplicitautograd dispatch.h
gather_backward_native.h
gather backward ops.h
\verb|gather_composite explicit autograd nonfunctional_dispatch.h|
gather compositeimplicitautograd dispatch.h
gather cpu dispatch.h
gather_cuda_dispatch.h
gather meta.h
gather_meta_dispatch.h
gather native.h
gather_ops.h
gcd.h
gcd_compositeexplicitautogradnonfunctional_dispatch.h
gcd cpu dispatch.h
gcd_cuda_dispatch.h
gcd meta.h
gcd_meta_dispatch.h
gcd native.h
gcd_ops.h
ge.h
gelu.h
gelu backward.h
gelu backward compositeexplicitautogradnonfunctional dispatch.h
gelu_backward_cpu_dispatch.h
gelu backward cuda dispatch.h
gelu_backward_meta.h
gelu backward meta dispatch.h
gelu_backward_native.h
gelu backward ops.h
\verb"gelu_composite explicit autograd nonfunctional_dispatch.h"
gelu cpu dispatch.h
gelu_cuda_dispatch.h
gelu meta.h
gelu_meta_dispatch.h
gelu native.h
gelu_ops.h
geometric.h
{\tt geometric\_composite explicit autograd\_dispatch.h}
geometric_cpu_dispatch.h
geometric_cuda_dispatch.h
geometric_meta_dispatch.h
geometric native.h
geometric_ops.h
geqrf.h
geqrf_cpu_dispatch.h
geqrf_cuda_dispatch.h
geqrf_native.h
geqrf ops.h
```

```
ger.h
ger compositeimplicitautograd dispatch.h
ger_native.h
ger ops.h
ge_compositeexplicitautogradnonfunctional_dispatch.h
ge cpu dispatch.h
ge_cuda_dispatch.h
ge meta.h
ge_meta_dispatch.h
ge_native.h
ge ops.h
glu.h
glu backward.h
glu_backward_cpu_dispatch.h
glu backward cuda dispatch.h
glu_backward_jvp.h
glu_backward_jvp_compositeexplicitautograd_dispatch.h
glu_backward_jvp_cpu_dispatch.h
glu backward jvp cuda dispatch.h
glu_backward_jvp_native.h
glu backward jvp ops.h
glu_backward_native.h
glu backward ops.h
\verb"glu_composite explicit autograd non functional_dispatch.h"
glu cpu dispatch.h
glu cuda dispatch.h
glu_jvp.h
glu jvp compositeexplicitautograd dispatch.h
glu_jvp_cpu_dispatch.h
glu jvp cuda dispatch.h
glu_jvp_native.h
glu_jvp_ops.h
glu_meta.h
glu_meta_dispatch.h
glu_native.h
glu ops.h
gradient.h
gradient compositeimplicitautograd dispatch.h
gradient_native.h
gradient ops.h
greater.h
greater_compositeimplicitautograd_dispatch.h
greater_equal.h
\verb|greater_equal_composite implicit autograd_dispatch.h|
greater equal native.h
greater_equal_ops.h
greater native.h
greater_ops.h
grid sampler.h
grid_sampler_2d.h
grid sampler 2d backward.h
```

```
grid_sampler_2d_backward_compositeexplicitautograd_dispatch.h
            grid sampler 2d backward cpu dispatch.h
            grid_sampler_2d_backward_cuda_dispatch.h
            grid sampler 2d backward native.h
            grid_sampler_2d_backward_ops.h
            grid sampler 2d compositeexplicitautograd dispatch.h
            grid_sampler_2d_cpu_dispatch.h
            grid sampler 2d cuda dispatch.h
            grid_sampler_2d_native.h
            grid_sampler_2d_ops.h
            grid sampler 3d.h
            grid_sampler_3d_backward.h
            grid sampler 3d backward compositeexplicitautograd dispatch.h
            grid_sampler_3d_backward_cpu_dispatch.h
            grid sampler 3d backward cuda dispatch.h
            grid_sampler_3d_backward_native.h
            grid sampler 3d backward ops.h
            grid_sampler_3d_compositeexplicitautograd_dispatch.h
            grid sampler 3d cpu dispatch.h
            grid_sampler_3d_cuda_dispatch.h
            grid sampler 3d native.h
            grid_sampler_3d_ops.h
            grid sampler compositeimplicitautograd dispatch.h
            grid_sampler_native.h
            grid sampler ops.h
            group_norm.h
            group_norm_compositeimplicitautograd_dispatch.h
            group norm native.h
            group_norm_ops.h
            gru.h
            gru_cell.h
            gru cell compositeimplicitautograd dispatch.h
            gru_cell_native.h
            gru cell ops.h
            gru_compositeimplicitautograd_dispatch.h
            gru native.h
            gru_ops.h
            gt.h
            \verb|gt_composite explicit autograd nonfunctional_dispatch.h|
            gt cpu dispatch.h
            gt_cuda_dispatch.h
            gt meta.h
            gt_meta_dispatch.h
            gt native.h
            gt ops.h
            hamming_window.h
            hamming_window_compositeexplicitautograd_dispatch.h
            hamming_window_native.h
1
            hamming window ops.h
            hann window.h
            hann window compositeexplicitautograd dispatch.h
```

-			1	1	1	hann_window_native.h
	1		1	1		hann_window_ops.h
-	-	1	1	1	1	hardshrink.h
	1		1	1		hardshrink_backward.h
	1		1	1		hardshrink_backward_compositeexplicitautogradnonfunctional_dispatch.h
-	-	1	1	1	1	hardshrink_backward_cpu_dispatch.h
-	1	1	1	I	1	hardshrink_backward_cuda_dispatch.h
1	1		I	I	1	hardshrink_backward_meta.h
1	I		I	I	1	hardshrink_backward_meta_dispatch.h
1	1		I	I	1	hardshrink_backward_native.h
1	I		I	I	1	hardshrink_backward_ops.h
1	I		I	I	1	hardshrink_compositeexplicitautogradnonfunctional_dispatch.h
1	1		I	ı		hardshrink_cpu_dispatch.h
I	I	1	I	ı	1	hardshrink_cuda_dispatch.h
I	1	I	ı	I	1	hardshrink_meta.h
I	I	I	I	I	1	hardshrink_meta_dispatch.h
ı	1		ı	ı		hardshrink_native.h
ı	1		ı	ı		hardshrink ops.h
ı	ı	ı	ı	ı	1	hardsigmoid.h
1	1	ı	ı	ı	1	hardsigmoid_backward.h
ı	Ī	ı	ı	ı	1	hardsigmoid_backward_compositeexplicitautogradnonfunctional_dispatch.h
i	i	i	i	i	·	hardsigmoid backward cpu dispatch.h
i	i	·	i	i	·	hardsigmoid_backward_cuda_dispatch.h
i	i	i		i	i I	hardsigmoid_backward_meta.h
·	·	·		·	i I	hardsigmoid_backward_meta_dispatch.h
·	·	·			' I	hardsigmoid_backward_native.h
i		' 			i I	hardsigmoid backward ops.h
·	·	·			' I	hardsigmoid_compositeexplicitautogradnonfunctional_dispatch.h
i	i	i	i	·	' 	hardsigmoid_cpu_dispatch.h
·	·	·		·	' I	hardsigmoid_cuda_dispatch.h
		' 			' 	hardsigmoid meta.h
i		' 			' 	hardsigmoid meta dispatch.h
		' 			' 	hardsigmoid native.h
'	,	'		,	' 	hardsigmoid ops.h
	'	'		'	ı	hardswish.h
	'	1	1	'	ı	hardswish backward.h
		1			ı	hardswish_backward_compositeexplicitautograd_dispatch.h
	'	'		'	ı	hardswish_backward_compositeexpriseratiograd_drspatch.n
	'	1	1	'	ı	hardswish backward cuda dispatch.h
	'	1	1	'	ı	hardswish_backward_cuta_dispatch.n
	'			'	1	
		1		'	1	hardswish_backward_ops.h
				'	1	hardswish_cpu_dispatch.h
	'			'	1	hardswish_cuda_dispatch.h
1	- 1	1	1	1	ı	hardswish_meta_dispatch.h
1	1	1	1	1	ı	hardswish_native.h
1	1	1	1	1	1	hardswish_ops.h
1	1	1	1	1	1	hardtanh.h
1	- 1	1	1	ı	1	hardtanh_backward.h
1	1	1	1	1	1	hardtanh_backward_cpu_dispatch.h
1	, ,	1	1	1		hardtanh_backward_cuda_dispatch.h
ı	1	1	I	I	I	hardtanh_backward_native.h

```
hardtanh_backward_ops.h
            hardtanh_cpu_dispatch.h
            hardtanh_cuda_dispatch.h
            hardtanh meta dispatch.h
            hardtanh_native.h
            hardtanh ops.h
            heaviside.h
            heaviside compositeexplicitautogradnonfunctional dispatch.h
            heaviside_cpu_dispatch.h
            heaviside_cuda_dispatch.h
            heaviside meta.h
            heaviside_meta_dispatch.h
            heaviside native.h
            heaviside_ops.h
            hinge embedding loss.h
            hinge_embedding_loss_compositeimplicitautograd_dispatch.h
            hinge_embedding_loss_native.h
            hinge_embedding_loss_ops.h
            histc.h
            histc_cpu_dispatch.h
            histc cuda dispatch.h
            histc_native.h
            histc ops.h
            histogram.h
            histogramdd.h
            histogramdd_compositeimplicitautograd_dispatch.h
            histogramdd_native.h
            histogramdd ops.h
            histogram_cpu_dispatch.h
            histogram native.h
            histogram_ops.h
            hsplit.h
            hsplit_compositeimplicitautograd_dispatch.h
            hsplit_native.h
            hsplit_ops.h
            hspmm.h
            hspmm_native.h
            hspmm ops.h
            hstack.h
            hstack compositeimplicitautograd dispatch.h
            hstack_native.h
            hstack_ops.h
            huber_loss.h
            huber_loss_backward.h
            huber loss backward compositeexplicitautograd dispatch.h
            huber_loss_backward_cpu_dispatch.h
            huber_loss_backward_cuda_dispatch.h
            huber_loss_backward_native.h
1
            huber_loss_backward_ops.h
            huber_loss_cpu_dispatch.h
            huber loss cuda dispatch.h
```

```
huber_loss_native.h
huber loss ops.h
hypot.h
hypot compositeexplicitautogradnonfunctional dispatch.h
hypot_cpu_dispatch.h
hypot cuda dispatch.h
hypot_meta.h
hypot meta dispatch.h
hypot_native.h
hypot_ops.h
i0.h
\verb|i0_composite explicit autograd nonfunctional_dispatch.h|
i0 cpu dispatch.h
i0_cuda_dispatch.h
i0 meta.h
i0_meta_dispatch.h
iO native.h
i0_ops.h
igamma.h
igammac.h
igammac compositeexplicitautogradnonfunctional dispatch.h
igammac_cpu_dispatch.h
igammac cuda dispatch.h
igammac_meta.h
igammac meta dispatch.h
igammac native.h
igammac_ops.h
igamma compositeexplicitautogradnonfunctional dispatch.h
igamma_cpu_dispatch.h
igamma cuda dispatch.h
igamma_meta.h
igamma_meta_dispatch.h
igamma_native.h
igamma ops.h
im2col.h
im2col cpu dispatch.h
im2col_cuda_dispatch.h
im2col native.h
im2col_ops.h
imag.h
\verb|imag_composite| implicit autograd_dispatch.h|
imag_native.h
imag_ops.h
index.h
index add.h
\verb|index_add_composite explicit autograd nonfunctional_dispatch.h|
index_add_compositeimplicitautograd_dispatch.h
\verb"index_add_cpu_dispatch.h"
index add cuda dispatch.h
index_add_meta.h
index add meta dispatch.h
```

```
index_add_native.h
            index add ops.h
            \verb|index_composite explicit autograd nonfunctional_dispatch.h|
            index copy.h
            index_copy_compositeexplicitautogradnonfunctional_dispatch.h
            index copy compositeimplicitautograd dispatch.h
            index_copy_cpu_dispatch.h
            index copy cuda dispatch.h
            index_copy_meta.h
            index_copy_meta_dispatch.h
            index copy native.h
            index_copy_ops.h
            index cpu dispatch.h
            index_cuda_dispatch.h
            index fill.h
            index_fill_compositeexplicitautograd_dispatch.h
            index_fill_compositeimplicitautograd_dispatch.h
            index_fill_cpu_dispatch.h
            index fill cuda dispatch.h
            index_fill_meta_dispatch.h
            index fill native.h
            index_fill_ops.h
            index meta.h
            index_meta_dispatch.h
            index native.h
            index_ops.h
            index_put.h
            index put compositeexplicitautograd dispatch.h
            index_put_native.h
            index put ops.h
            index_reduce.h
            index reduce compositeexplicitautogradnonfunctional dispatch.h
            index_reduce_cpu_dispatch.h
            index_reduce_cuda_dispatch.h
            index_reduce_meta.h
            index reduce meta dispatch.h
            index_reduce_native.h
            index reduce ops.h
            index_select.h
            index select backward.h
            \verb|index_select_backward_composite implicit autograd_dispatch.h|
            index_select_backward_native.h
            index_select_backward_ops.h
            index_select_compositeimplicitautograd_dispatch.h
            index_select_cpu_dispatch.h
            \verb"index_select_cuda_dispatch.h"
            index_select_native.h
            index_select_ops.h
1
            indices.h
            indices_compositeexplicitautograd_dispatch.h
            indices copy.h
```

```
\verb|indices_copy_compositeexplicit autograd nonfunctional_dispatch.h|
            indices copy compositeexplicitautograd dispatch.h
            indices_copy_native.h
            indices copy ops.h
            indices_native.h
            indices ops.h
            infinitely_differentiable_gelu_backward.h
            infinitely_differentiable_gelu_backward_compositeimplicitautograd_dispatch.h
            infinitely_differentiable_gelu_backward_native.h
            infinitely_differentiable_gelu_backward_ops.h
            inner.h
            \verb|inner_composite| implicit autograd_dispatch.h|
            inner native.h
            inner_ops.h
            instance norm.h
            instance_norm_compositeimplicitautograd_dispatch.h
            instance norm native.h
            instance_norm_ops.h
            int repr.h
            int_repr_compositeexplicitautograd_dispatch.h
            int repr native.h
            int_repr_ops.h
            inverse.h
            {\tt inverse\_composite implicit autograd\_dispatch.h}
            inverse native.h
            inverse ops.h
            isclose.h
            isclose compositeimplicitautograd dispatch.h
            isclose_native.h
            isclose ops.h
            isfinite.h
            isfinite compositeimplicitautograd dispatch.h
            isfinite_native.h
            isfinite ops.h
            isin.h
            isinf.h
            \verb|isinf_composite explicit autograd_dispatch.h|
            isinf native.h
            isinf_ops.h
            isin compositeexplicitautogradnonfunctional dispatch.h
            isin_cpu_dispatch.h
            isin_cuda_dispatch.h
            isin meta.h
            isin_meta_dispatch.h
            isin native.h
            isin_ops.h
            isnan_compositeexplicitautograd_dispatch.h
1
            isnan cpu dispatch.h
            isnan_cuda_dispatch.h
            isnan native.h
```

```
isnan_ops.h
            isneginf.h
            is neginf\_composite explicit autograd nonfunctional\_dispatch.h
            isneginf cpu dispatch.h
            isneginf_cuda_dispatch.h
            isneginf meta.h
            isneginf_meta_dispatch.h
            isneginf_native.h
            isneginf ops.h
            isposinf.h
            isposinf compositeexplicitautogradnonfunctional dispatch.h
            isposinf_cpu_dispatch.h
            isposinf cuda dispatch.h
            isposinf_meta.h
            isposinf meta dispatch.h
            isposinf_native.h
            isposinf ops.h
            isreal.h
            isreal compositeimplicitautograd dispatch.h
            isreal_native.h
            isreal ops.h
            istft.h
            istft compositeimplicitautograd dispatch.h
            istft_native.h
            istft_ops.h
            is coalesced.h
            {\tt is\_coalesced\_composite explicit autograd\_dispatch.h}
            is coalesced native.h
            is_coalesced_ops.h
            is complex.h
            is_complex_compositeimplicitautograd_dispatch.h
            is complex native.h
            is_complex_ops.h
            is conj.h
            is_conj_compositeimplicitautograd_dispatch.h
            is conj native.h
            is_conj_ops.h
            is distributed.h
            {\tt is\_distributed\_compositeimplicitautograd\_dispatch.h}
            is distributed native.h
            is_distributed_ops.h
            is_floating_point.h
            is floating point compositeimplicitautograd dispatch.h
            {\tt is\_floating\_point\_native.h}
            is floating point ops.h
            is_inference.h
            is inference compositeimplicitautograd dispatch.h
            is_inference_native.h
-
            is inference ops.h
            is_leaf.h
            is leaf compositeimplicitautograd dispatch.h
```

```
is_leaf_native.h
is leaf ops.h
is_neg.h
is neg compositeimplicitautograd dispatch.h
is_neg_native.h
is neg ops.h
is_nonzero.h
is nonzero compositeimplicitautograd dispatch.h
is_nonzero_native.h
is_nonzero_ops.h
is pinned.h
\verb|is_pinned_composite explicit autograd_dispatch.h|
is pinned native.h
is_pinned_ops.h
is same size.h
\verb|is_same_size_composite explicit autograd_dispatch.h|
is_same_size_native.h
is_same_size_ops.h
is set to.h
is_set_to_cpu_dispatch.h
is_set_to_cuda_dispatch.h
is_set_to_native.h
is set to ops.h
is_signed.h
is_signed_compositeimplicitautograd_dispatch.h
is signed native.h
is_signed_ops.h
is vulkan available.h
\verb|is_vulkan_available_composite implicit autograd_dispatch.h|
is vulkan available native.h
is_vulkan_available_ops.h
item.h
item_compositeimplicitautograd_dispatch.h
item native.h
item_ops.h
kaiser window.h
\verb|kaiser_window_compositeexplicitautograd_dispatch.h|
kaiser window native.h
kaiser_window_ops.h
kl div.h
{\tt kl\_div\_compositeimplicitautograd\_dispatch.h}
kl_div_native.h
kl_div_ops.h
kron.h
kron compositeimplicitautograd dispatch.h
kron_native.h
kron ops.h
kthvalue.h
kthvalue compositeexplicitautograd dispatch.h
kthvalue_compositeimplicitautograd_dispatch.h
kthvalue cpu dispatch.h
```

```
kthvalue_cuda_dispatch.h
            kthvalue native.h
            kthvalue_ops.h
            11 loss.h
            11_loss_compositeimplicitautograd_dispatch.h
            11 loss native.h
            l1_loss_ops.h
            layer norm.h
            layer norm compositeimplicitautograd dispatch.h
            layer_norm_native.h
            layer norm ops.h
            lcm.h
            lcm compositeexplicitautogradnonfunctional dispatch.h
            lcm_cpu_dispatch.h
            lcm cuda dispatch.h
            lcm_meta.h
            lcm_meta_dispatch.h
            lcm_native.h
            1cm ops.h
            ldexp.h
            ldexp compositeimplicitautograd dispatch.h
            ldexp_native.h
            ldexp ops.h
            le.h
            leaky relu.h
            leaky relu backward.h
            \verb|leaky_relu_backward_composite explicit autograd nonfunctional_dispatch.h|
            leaky relu backward cpu dispatch.h
            leaky_relu_backward_cuda_dispatch.h
            leaky relu backward meta.h
            leaky_relu_backward_meta_dispatch.h
            leaky relu backward native.h
            leaky_relu_backward_ops.h
            leaky relu compositeexplicitautogradnonfunctional dispatch.h
            leaky_relu_cpu_dispatch.h
            leaky relu cuda dispatch.h
            leaky_relu_meta.h
            leaky relu meta dispatch.h
            leaky_relu_native.h
            leaky relu ops.h
            lerp.h
            lerp_compositeexplicitautogradnonfunctional_dispatch.h
            lerp_cpu_dispatch.h
            lerp_cuda_dispatch.h
            lerp meta.h
            lerp_meta_dispatch.h
            lerp native.h
            lerp_ops.h
-
            less.h
            less_compositeimplicitautograd_dispatch.h
            less equal.h
```

```
less_equal_compositeimplicitautograd_dispatch.h
            less equal native.h
            less_equal_ops.h
            less native.h
            less_ops.h
            le compositeexplicitautogradnonfunctional dispatch.h
            le_cpu_dispatch.h
            le cuda dispatch.h
            le meta.h
            le_meta_dispatch.h
            le native.h
            le_ops.h
            lgamma.h
            {\tt lgamma\_composite explicit autograd non functional\_dispatch.} h
            lgamma cpu dispatch.h
            lgamma_cuda_dispatch.h
            lgamma meta.h
            lgamma_meta_dispatch.h
            lgamma native.h
            lgamma_ops.h
            lift.h
            lift_compositeexplicitautograd_dispatch.h
            lift fresh.h
            lift_fresh_compositeexplicitautograd_dispatch.h
            lift fresh copy.h
            {\tt lift\_fresh\_copy\_composite explicit autograd nonfunctional\_dispatch.h}
            {\tt lift\_fresh\_copy\_composite explicit autograd\_dispatch.h}
            lift fresh copy native.h
            lift_fresh_copy_ops.h
            lift fresh native.h
            lift_fresh_ops.h
            lift native.h
            lift_ops.h
            linalg cholesky.h
            linalg_cholesky_compositeimplicitautograd_dispatch.h
            linalg cholesky ex.h
            \verb|linalg_cholesky_ex_composite explicit autograd nonfunctional_dispatch.h|
            linalg cholesky ex cpu dispatch.h
            linalg_cholesky_ex_cuda_dispatch.h
            linalg cholesky ex meta.h
            linalg_cholesky_ex_meta_dispatch.h
            linalg_cholesky_ex_native.h
            linalg_cholesky_ex_ops.h
            linalg_cholesky_native.h
            linalg cholesky ops.h
            linalg_cond.h
            linalg_cond_compositeimplicitautograd_dispatch.h
            linalg_cond_native.h
1
            linalg cond ops.h
            linalg_cross.h
            linalg cross compositeexplicitautogradnonfunctional dispatch.h
```

```
linalg_cross_cpu_dispatch.h
                    linalg cross cuda dispatch.h
                    linalg_cross_meta.h
                    linalg cross meta dispatch.h
                    linalg_cross_native.h
                    linalg cross ops.h
                    linalg_det.h
                    linalg_det_compositeimplicitautograd_dispatch.h
                    linalg det native.h
                    linalg_det_ops.h
                    linalg diagonal.h
                    {\tt linalg\_diagonal\_compositeimplicitautograd\_dispatch.h}
                    linalg diagonal native.h
                    linalg_diagonal_ops.h
                    linalg eig.h
                    linalg_eigh.h
                    linalg_eigh_compositeimplicitautograd_dispatch.h
                    linalg_eigh_native.h
                    linalg eigh ops.h
                    linalg_eigvals.h
                    linalg eigvalsh.h
                    {\tt linalg\_eigvalsh\_compositeimplicitautograd\_dispatch.h}
                    linalg eigvalsh native.h
                    linalg_eigvalsh_ops.h
                    linalg_eigvals_compositeimplicitautograd_dispatch.h
                    linalg eigvals cpu dispatch.h
                    linalg_eigvals_cuda_dispatch.h
                    linalg eigvals native.h
                    linalg_eigvals_ops.h
                    linalg eig cpu dispatch.h
                    linalg_eig_cuda_dispatch.h
                    linalg eig native.h
                    linalg_eig_ops.h
                    linalg householder product.h
                    linalg_householder_product_cpu_dispatch.h
                    linalg householder product cuda dispatch.h
                    linalg_householder_product_native.h
                    linalg householder product ops.h
                    linalg_inv.h
                    linalg inv compositeimplicitautograd dispatch.h
                    linalg_inv_ex.h
                    linalg_inv_ex_compositeexplicitautogradnonfunctional_dispatch.h
                    linalg inv ex cpu dispatch.h
                    linalg_inv_ex_cuda_dispatch.h
                    linalg inv ex meta.h
                    linalg_inv_ex_meta_dispatch.h
                    linalg_inv_ex_native.h
                    linalg_inv_ex_ops.h
-
                    linalg inv native.h
                    linalg_inv_ops.h
                    linalg ldl factor.h
```

```
linalg_ldl_factor_compositeimplicitautograd_dispatch.h
linalg ldl factor ex.h
linalg_ldl_factor_ex_compositeexplicitautogradnonfunctional_dispatch.h
linalg ldl factor ex cpu dispatch.h
linalg_ldl_factor_ex_cuda_dispatch.h
linalg ldl factor ex meta.h
linalg_ldl_factor_ex_meta_dispatch.h
linalg ldl factor ex native.h
linalg_ldl_factor_ex_ops.h
linalg_ldl_factor_native.h
linalg ldl factor ops.h
linalg_ldl_solve.h
linalg ldl solve compositeexplicitautogradnonfunctional dispatch.h
linalg_ldl_solve_cpu_dispatch.h
linalg ldl solve cuda dispatch.h
linalg_ldl_solve_meta.h
linalg_ldl_solve_meta_dispatch.h
linalg_ldl_solve_native.h
linalg ldl solve ops.h
linalg_lstsq.h
linalg lstsq compositeexplicitautograd dispatch.h
linalg_lstsq_cpu_dispatch.h
linalg 1stsq cuda dispatch.h
linalg_lstsq_native.h
linalg lstsq ops.h
linalg lu.h
\verb|linalg_lu_composite explicit autograd nonfunctional_dispatch.h|
linalg lu cpu dispatch.h
linalg_lu_cuda_dispatch.h
linalg lu factor.h
linalg_lu_factor_compositeimplicitautograd_dispatch.h
linalg lu factor ex.h
linalg_lu_factor_ex_compositeexplicitautogradnonfunctional_dispatch.h
linalg lu factor ex cpu dispatch.h
linalg_lu_factor_ex_cuda_dispatch.h
linalg lu factor ex meta.h
linalg_lu_factor_ex_meta_dispatch.h
linalg lu factor ex native.h
linalg_lu_factor_ex_ops.h
linalg lu factor native.h
linalg_lu_factor_ops.h
linalg_lu_meta.h
linalg_lu_meta_dispatch.h
linalg_lu_native.h
linalg lu ops.h
linalg_lu_solve.h
linalg_lu_solve_compositeexplicitautogradnonfunctional_dispatch.h
linalg_lu_solve_cpu_dispatch.h
linalg lu solve cuda dispatch.h
linalg_lu_solve_meta.h
linalg lu solve meta dispatch.h
```

```
linalg_lu_solve_native.h
linalg lu solve ops.h
linalg matmul.h
linalg matmul compositeimplicitautograd dispatch.h
linalg_matmul_native.h
linalg matmul ops.h
linalg_matrix_exp.h
linalg matrix exp compositeexplicitautograd dispatch.h
linalg_matrix_exp_cpu_dispatch.h
linalg_matrix_exp_cuda_dispatch.h
linalg matrix exp native.h
linalg_matrix_exp_ops.h
linalg matrix norm.h
linalg_matrix_norm_compositeimplicitautograd_dispatch.h
linalg matrix norm native.h
linalg_matrix_norm_ops.h
linalg matrix power.h
linalg_matrix_power_compositeimplicitautograd_dispatch.h
linalg matrix power native.h
linalg_matrix_power_ops.h
linalg matrix rank.h
{\tt linalg\_matrix\_rank\_compositeimplicitautograd\_dispatch.h}
linalg matrix rank native.h
linalg_matrix_rank_ops.h
linalg multi dot.h
linalg_multi_dot_compositeimplicitautograd_dispatch.h
linalg_multi_dot_native.h
linalg multi dot ops.h
linalg_norm.h
linalg norm compositeimplicitautograd dispatch.h
linalg_norm_native.h
linalg norm ops.h
linalg_pinv.h
linalg pinv compositeexplicitautogradnonfunctional dispatch.h
linalg_pinv_compositeexplicitautograd_dispatch.h
linalg pinv compositeimplicitautograd dispatch.h
linalg_pinv_native.h
linalg pinv ops.h
linalg_qr.h
linalg qr compositeexplicitautogradnonfunctional dispatch.h
linalg_qr_cpu_dispatch.h
linalg_qr_cuda_dispatch.h
linalg_qr_meta.h
linalg_qr_meta_dispatch.h
linalg qr native.h
linalg_qr_ops.h
linalg slogdet.h
linalg_slogdet_compositeimplicitautograd_dispatch.h
linalg slogdet native.h
linalg_slogdet_ops.h
linalg solve.h
```

```
linalg_solve_compositeimplicitautograd_dispatch.h
                    linalg solve ex.h
                    linalg_solve_ex_compositeimplicitautograd_dispatch.h
                    linalg solve ex native.h
                    linalg_solve_ex_ops.h
                    linalg solve native.h
                    linalg_solve_ops.h
                    linalg solve triangular.h
                    linalg_solve_triangular_cpu_dispatch.h
                    linalg_solve_triangular_cuda_dispatch.h
                    linalg solve triangular native.h
                    linalg_solve_triangular_ops.h
                    linalg svd.h
                    linalg_svdvals.h
                    linalg svdvals compositeimplicitautograd dispatch.h
                    linalg_svdvals_native.h
                    linalg sydvals ops.h
                    linalg_svd_compositeimplicitautograd_dispatch.h
                    linalg svd native.h
                    linalg_svd_ops.h
                    linalg tensorinv.h
                    {\tt linalg\_tensorinv\_compositeimplicitautograd\_dispatch.h}
                    linalg tensorinv native.h
                    linalg_tensorinv_ops.h
                    linalg tensorsolve.h
                    linalg tensorsolve compositeimplicitautograd dispatch.h
                    linalg_tensorsolve_native.h
                    linalg tensorsolve ops.h
                    linalg_vander.h
                    linalg vander compositeimplicitautograd dispatch.h
                    linalg_vander_native.h
                    linalg vander ops.h
                    linalg_vecdot.h
                    linalg vecdot compositeimplicitautograd dispatch.h
                    linalg_vecdot_native.h
                    linalg vecdot ops.h
                    linalg_vector_norm.h
                    linalg vector norm compositeexplicitautogradnonfunctional dispatch.h
                    {\tt linalg\_vector\_norm\_cpu\_dispatch.h}
                    linalg vector norm cuda dispatch.h
                    linalg_vector_norm_meta.h
                    linalg_vector_norm_meta_dispatch.h
                    linalg_vector_norm_native.h
                    linalg_vector_norm_ops.h
                    linear.h
                    linear_backward.h
                    linear_backward_compositeexplicitautograd_dispatch.h
                    linear_backward_native.h
1
                    linear backward ops.h
                    linear_compositeexplicitautograd_dispatch.h
                    linear compositeimplicitautograd dispatch.h
```

```
linear_native.h
             linear ops.h
             linspace.h
             linspace compositeexplicitautograd dispatch.h
             linspace_cpu_dispatch.h
             linspace cuda dispatch.h
             linspace_meta_dispatch.h
             linspace native.h
             linspace ops.h
             log.h
             log10.h
    1
             {\tt log10\_composite explicit autograd non functional\_dispatch.} h
             log10 cpu dispatch.h
             log10_cuda_dispatch.h
             log10 meta.h
             log10_meta_dispatch.h
             log10 native.h
             log10_ops.h
             log1p.h
             {\tt log1p\_composite} {\tt explicitautograd} {\tt nonfunctional\_dispatch.h}
             log1p cpu dispatch.h
             log1p_cuda_dispatch.h
             log1p meta.h
             log1p_meta_dispatch.h
             log1p native.h
             log1p_ops.h
             log2.h
             log2 compositeexplicitautogradnonfunctional dispatch.h
             log2_cpu_dispatch.h
             log2 cuda dispatch.h
             log2_meta.h
             log2_meta_dispatch.h
             log2_native.h
             log2 ops.h
             logaddexp.h
             logaddexp2.h
             {\tt logaddexp2\_composite explicit autograd nonfunctional\_dispatch.} h
             logaddexp2 cpu dispatch.h
             logaddexp2_cuda_dispatch.h
             logaddexp2 meta.h
             logaddexp2_meta_dispatch.h
             logaddexp2_native.h
             logaddexp2_ops.h
             {\tt logaddexp\_composite explicit autograd nonfunctional\_dispatch.} h
             logaddexp cpu dispatch.h
             logaddexp_cuda_dispatch.h
             logaddexp_meta.h
             {\tt logaddexp\_meta\_dispatch.h}
1
             logaddexp native.h
             logaddexp_ops.h
             logcumsumexp.h
```

```
{\tt logcumsumexp\_composite} explicit autograd\_dispatch.h
            logcumsumexp compositeimplicitautograd dispatch.h
            logcumsumexp_native.h
            logcumsumexp ops.h
            logdet.h
            logdet compositeimplicitautograd dispatch.h
            logdet_native.h
            logdet ops.h
            logical and.h
            logical_and_compositeexplicitautograd_dispatch.h
            logical and cpu dispatch.h
            logical_and_cuda_dispatch.h
            logical and native.h
            logical_and_ops.h
            logical not.h
            logical_not_compositeexplicitautograd_dispatch.h
            logical_not_cpu_dispatch.h
            logical_not_cuda_dispatch.h
            logical not native.h
            logical_not_ops.h
            logical or.h
            {\tt logical\_or\_composite explicit autograd\_dispatch.h}
            logical or cpu dispatch.h
            logical_or_cuda_dispatch.h
            logical or native.h
            logical or ops.h
            logical_xor.h
            logical xor compositeexplicitautograd dispatch.h
            logical_xor_cpu_dispatch.h
            logical xor cuda dispatch.h
            logical_xor_native.h
            logical xor ops.h
            logit.h
            logit backward.h
            logit_backward_compositeexplicitautogradnonfunctional_dispatch.h
            logit backward cpu dispatch.h
            logit_backward_cuda_dispatch.h
            logit backward meta.h
            logit_backward_meta_dispatch.h
            logit backward native.h
            logit_backward_ops.h
            logit_cpu_dispatch.h
            logit_cuda_dispatch.h
            logit_meta_dispatch.h
            logit native.h
            logit_ops.h
            logspace.h
            logspace_compositeexplicitautograd_dispatch.h
1
            logspace_cpu_dispatch.h
            logspace_cuda_dispatch.h
            logspace meta dispatch.h
```

```
logspace_native.h
            logspace ops.h
            logsumexp.h
             logsumexp compositeexplicitautogradnonfunctional dispatch.h
            logsumexp_compositeexplicitautograd_dispatch.h
             logsumexp compositeimplicitautograd dispatch.h
            logsumexp_native.h
             logsumexp ops.h
            {\tt log\_composite explicit autograd nonfunctional\_dispatch.h}
            log_cpu_dispatch.h
            log cuda dispatch.h
            log_meta.h
            log_meta_dispatch.h
            log_native.h
            log normal.h
            {\tt log\_normal\_composite explicit autograd\_dispatch.h}
            log_normal_cpu_dispatch.h
            log_normal_cuda_dispatch.h
            log normal meta dispatch.h
            log_normal_native.h
             log normal ops.h
            log_ops.h
             log sigmoid.h
            log\_sigmoid\_backward.h
            log sigmoid backward cpu dispatch.h
            log_sigmoid_backward_cuda_dispatch.h
            log_sigmoid_backward_native.h
            log sigmoid backward ops.h
            {\tt log\_sigmoid\_compositeimplicitautograd\_dispatch.h}
            log sigmoid forward.h
            log_sigmoid_forward_cpu_dispatch.h
            log_sigmoid_forward_cuda_dispatch.h
            log_sigmoid_forward_native.h
            log sigmoid forward ops.h
            log_sigmoid_native.h
            log sigmoid ops.h
            log_softmax.h
            log softmax compositeexplicitautograd dispatch.h
            {\tt log\_softmax\_compositeimplicitautograd\_dispatch.h}
            log softmax native.h
            log_softmax_ops.h
            lshift.h
            lshift_compositeexplicitautograd_dispatch.h
            lshift_cpu_dispatch.h
            lshift cuda dispatch.h
            lshift_meta_dispatch.h
            lshift native.h
            lshift_ops.h
-
            lstm.h
            lstm_cell.h
             lstm cell compositeimplicitautograd dispatch.h
```

```
lstm_cell_native.h
1stm cell ops.h
lstm_compositeimplicitautograd_dispatch.h
1stm mps backward.h
lstm_mps_backward_compositeexplicitautograd_dispatch.h
1stm mps backward native.h
lstm_mps_backward_ops.h
lstm native.h
lstm_ops.h
lt.h
lt compositeexplicitautogradnonfunctional dispatch.h
lt_cpu_dispatch.h
lt cuda dispatch.h
lt_meta.h
lt meta dispatch.h
lt_native.h
lt ops.h
lu_solve.h
lu solve compositeimplicitautograd dispatch.h
lu_solve_native.h
lu solve ops.h
lu_unpack.h
lu unpack compositeexplicitautogradnonfunctional dispatch.h
lu_unpack_cpu_dispatch.h
lu unpack cuda dispatch.h
lu unpack meta.h
lu_unpack_meta_dispatch.h
lu unpack native.h
lu_unpack_ops.h
margin ranking loss.h
\verb|margin_ranking_loss_composite implicit autograd_dispatch.h|
margin ranking loss native.h
margin_ranking_loss_ops.h
masked fill.h
masked_fill_compositeexplicitautograd_dispatch.h
masked fill cpu dispatch.h
masked_fill_cuda_dispatch.h
masked fill meta dispatch.h
masked_fill_native.h
masked fill ops.h
masked_scatter.h
masked_scatter_backward.h
masked_scatter_backward_compositeexplicitautograd_dispatch.h
masked_scatter_backward_native.h
masked scatter backward ops.h
masked_scatter_compositeexplicitautograd_dispatch.h
masked_scatter_cpu_dispatch.h
masked_scatter_cuda_dispatch.h
masked scatter meta dispatch.h
masked_scatter_native.h
masked scatter ops.h
```

```
masked_select.h
            masked select backward.h
            masked_select_backward_compositeimplicitautograd_dispatch.h
            masked select backward native.h
            masked_select_backward_ops.h
            masked select cpu dispatch.h
            masked_select_cuda_dispatch.h
            masked select native.h
            masked select ops.h
            matmul.h
            matmul backward.h
            \verb|matmul_backward_composite explicit autograd_dispatch.h|
            matmul backward native.h
            matmul_backward_ops.h
            matmul compositeimplicitautograd dispatch.h
            matmul_native.h
            matmul ops.h
            matrix_exp.h
            matrix exp backward.h
            matrix_exp_backward_compositeimplicitautograd_dispatch.h
            matrix exp backward native.h
            matrix_exp_backward_ops.h
            matrix exp compositeimplicitautograd dispatch.h
            matrix_exp_native.h
            matrix exp ops.h
            matrix H.h
            \verb|matrix_H_composite implicit autograd_dispatch.h|
            matrix H native.h
            matrix_H_ops.h
            matrix power.h
            \verb|matrix_power_composite implicit autograd_dispatch.h|
            matrix power native.h
            matrix_power_ops.h
            max.h
            maximum.h
            maximum compositeexplicitautogradnonfunctional dispatch.h
            maximum_cpu_dispatch.h
            maximum cuda dispatch.h
            maximum_meta.h
            maximum meta dispatch.h
            maximum_native.h
            maximum_ops.h
            max_compositeexplicitautogradnonfunctional_dispatch.h
            \verb|max_composite implicit autograd_dispatch.h|
            max_cpu_dispatch.h
            max_cuda_dispatch.h
            max meta.h
            max_meta_dispatch.h
-
            max native.h
            max_ops.h
            max poolld.h
```

```
max_pool1d_compositeimplicitautograd_dispatch.h
            max poolld native.h
            max_pool1d_ops.h
            max poolld with indices.h
            max_poolld_with_indices_compositeimplicitautograd_dispatch.h
            max poolld with indices native.h
            max_pool1d_with_indices_ops.h
            max pool2d.h
            max_pool2d_backward.h
            max_pool2d_backward_compositeexplicitautograd_dispatch.h
            max pool2d backward native.h
            max_pool2d_backward_ops.h
            max pool2d compositeimplicitautograd dispatch.h
            max_pool2d_native.h
            max pool2d ops.h
            max_pool2d_with_indices.h
            max pool2d with indices backward.h
            max_pool2d_with_indices_backward_compositeexplicitautogradnonfunctional_dispatch.h
            max pool2d with indices backward cpu dispatch.h
            max_pool2d_with_indices_backward_cuda_dispatch.h
            max pool2d with indices backward meta.h
            max_pool2d_with_indices_backward_meta_dispatch.h
            max pool2d with indices backward native.h
            max_pool2d_with_indices_backward_ops.h
            max pool2d with indices compositeexplicitautogradnonfunctional dispatch.h
            max_pool2d_with_indices_cpu_dispatch.h
            max_pool2d_with_indices_cuda_dispatch.h
            max pool2d with indices meta.h
            max_pool2d_with_indices_meta_dispatch.h
            max_pool2d_with_indices native.h
            max_pool2d_with_indices_ops.h
            max pool3d.h
            max_pool3d_compositeimplicitautograd_dispatch.h
            max pool3d native.h
            max_pool3d_ops.h
            max pool3d with indices.h
            max_pool3d_with_indices_backward.h
            max pool3d with indices backward cpu dispatch.h
            \verb|max_pool3d_with_indices_backward_cuda_dispatch.h|
            max pool3d with indices backward native.h
            max_pool3d_with_indices_backward_ops.h
            max_pool3d_with_indices_cpu_dispatch.h
            max_pool3d_with_indices_cuda_dispatch.h
            max_pool3d_with_indices_native.h
            max pool3d with indices ops.h
            max_unpool2d.h
            max_unpool2d_cpu_dispatch.h
            max_unpool2d_cuda_dispatch.h
-
            max unpool2d native.h
            max_unpool2d_ops.h
            max unpool3d.h
```

```
max_unpool3d_cpu_dispatch.h
max_unpool3d_cuda_dispatch.h
max_unpool3d_native.h
max unpool3d ops.h
mean.h
mean compositeexplicitautogradnonfunctional dispatch.h
{\tt mean\_composite explicit autograd\_dispatch.h}
mean compositeimplicitautograd dispatch.h
mean_cpu_dispatch.h
mean_cuda_dispatch.h
mean meta.h
mean_meta_dispatch.h
mean native.h
mean_ops.h
median.h
{\tt median\_composite explicit autograd\_dispatch.h}
median compositeimplicitautograd dispatch.h
median_cpu_dispatch.h
median cuda dispatch.h
median_native.h
median ops.h
meshgrid.h
meshgrid compositeimplicitautograd dispatch.h
meshgrid_native.h
meshgrid ops.h
mH.h
\verb|mH_composite implicit autograd_dispatch.h|
mH native.h
mH_ops.h
min.h
minimum.h
minimum compositeexplicitautogradnonfunctional dispatch.h
minimum_cpu_dispatch.h
minimum cuda dispatch.h
minimum meta.h
minimum meta dispatch.h
minimum_native.h
minimum ops.h
\verb|min_composite explicit autograd nonfunctional_dispatch.h|
min compositeimplicitautograd dispatch.h
min_cpu_dispatch.h
min_cuda_dispatch.h
min meta.h
min_meta_dispatch.h
min native.h
min_ops.h
miopen batch norm.h
miopen_batch_norm_backward.h
miopen_batch_norm_backward_compositeexplicitautograd_dispatch.h
miopen_batch_norm_backward_cuda_dispatch.h
miopen batch norm backward native.h
```

```
miopen_batch_norm_backward_ops.h
miopen_batch_norm_compositeexplicitautograd_dispatch.h
miopen_batch_norm_cuda_dispatch.h
miopen batch norm native.h
miopen_batch_norm_ops.h
miopen convolution.h
miopen_convolution_add_relu.h
miopen convolution add relu cuda dispatch.h
miopen_convolution_add_relu_native.h
miopen_convolution_add_relu_ops.h
miopen convolution compositeexplicitautograd dispatch.h
miopen_convolution_cuda_dispatch.h
miopen convolution native.h
miopen_convolution_ops.h
miopen convolution relu.h
miopen_convolution_relu_cuda_dispatch.h
miopen convolution relu native.h
miopen_convolution_relu_ops.h
miopen convolution transpose.h
miopen_convolution_transpose_compositeexplicitautograd_dispatch.h
miopen convolution transpose cuda dispatch.h
miopen_convolution_transpose_native.h
miopen convolution transpose ops.h
miopen_depthwise_convolution.h
miopen depthwise convolution compositeexplicitautograd dispatch.h
miopen_depthwise_convolution_cuda_dispatch.h
miopen_depthwise_convolution_native.h
miopen depthwise convolution ops.h
miopen_rnn.h
miopen rnn backward.h
miopen_rnn_backward_compositeexplicitautograd_dispatch.h
miopen rnn backward cuda dispatch.h
miopen_rnn_backward_native.h
miopen rnn backward ops.h
miopen_rnn_compositeexplicitautograd_dispatch.h
miopen rnn cuda dispatch.h
miopen_rnn_native.h
miopen rnn ops.h
mish.h
mish backward.h
mish_backward_compositeimplicitautograd_dispatch.h
mish_backward_cpu_dispatch.h
mish_backward_cuda_dispatch.h
mish_backward_native.h
mish backward ops.h
\verb|mish_composite explicit autograd nonfunctional_dispatch.h|
mish cpu dispatch.h
mish_cuda_dispatch.h
mish meta.h
mish_meta_dispatch.h
mish native.h
```

```
mish_ops.h
            mkldnn adaptive avg pool2d.h
            mkldnn_adaptive_avg_pool2d_backward.h
            mkldnn adaptive avg pool2d backward compositeexplicitautograd dispatch.h
            mkldnn_adaptive_avg_pool2d_backward_native.h
            mkldnn adaptive avg pool2d backward ops.h
            mkldnn_adaptive_avg_pool2d_native.h
            mkldnn adaptive avg pool2d ops.h
            mkldnn convolution.h
            mkldnn_convolution_compositeexplicitautograd_dispatch.h
            mkldnn convolution native.h
            mkldnn_convolution_ops.h
            mkldnn linear.h
            mkldnn_linear_backward.h
            mkldnn linear backward compositeexplicitautograd dispatch.h
            mkldnn_linear_backward_input.h
            mkldnn linear backward input compositeexplicitautograd dispatch.h
            mkldnn_linear_backward_input_native.h
            mkldnn linear backward input ops.h
            mkldnn_linear_backward_native.h
            mkldnn linear backward ops.h
            mkldnn_linear_backward_weights.h
            mkldnn linear backward weights compositeexplicitautograd dispatch.h
            mkldnn_linear_backward_weights_native.h
            mkldnn linear backward weights ops.h
            mkldnn linear compositeexplicitautograd dispatch.h
            mkldnn linear native.h
            mkldnn linear ops.h
            mkldnn_max_pool2d.h
            mkldnn max pool2d backward.h
            \verb|mkldnn_max_pool2d_backward_composite explicit autograd_dispatch.h|
            mkldnn max pool2d backward native.h
            mkldnn_max_pool2d_backward_ops.h
            mkldnn max pool2d compositeexplicitautograd dispatch.h
            mkldnn_max_pool2d_native.h
            mkldnn max pool2d ops.h
            mkldnn_max_pool3d.h
            mkldnn max pool3d backward.h
            mkldnn_max_pool3d_backward_compositeexplicitautograd_dispatch.h
            mkldnn max pool3d backward native.h
            mkldnn_max_pool3d_backward_ops.h
            mkldnn_max_pool3d_compositeexplicitautograd_dispatch.h
            mkldnn_max_pool3d_native.h
            mkldnn_max_pool3d_ops.h
            mkldnn reorder conv2d weight.h
            mkldnn_reorder_conv2d_weight_compositeexplicitautograd_dispatch.h
            mkldnn_reorder_conv2d_weight_native.h
            mkldnn_reorder_conv2d_weight_ops.h
1
            mkldnn reorder conv3d weight.h
            mkldnn_reorder_conv3d_weight_compositeexplicitautograd_dispatch.h
            mkldnn reorder conv3d weight native.h
```

```
mkldnn_reorder_conv3d_weight_ops.h
mkldnn rnn layer.h
mkldnn_rnn_layer_backward.h
mkldnn rnn layer backward compositeexplicitautograd dispatch.h
mkldnn_rnn_layer_backward_cpu_dispatch.h
mkldnn rnn layer backward native.h
mkldnn_rnn_layer_backward_ops.h
mkldnn rnn layer compositeexplicitautograd dispatch.h
mkldnn_rnn_layer_cpu_dispatch.h
mkldnn_rnn_layer_native.h
mkldnn rnn layer ops.h
mm.h
mm compositeexplicitautogradnonfunctional dispatch.h
mm_cpu_dispatch.h
mm cuda dispatch.h
mm_meta.h
mm meta dispatch.h
mm native.h
mm ops.h
mode.h
mode compositeexplicitautograd dispatch.h
\verb|mode_compositeimplicitautograd_dispatch.h|
mode cpu dispatch.h
mode_cuda_dispatch.h
mode native.h
mode ops.h
moveaxis.h
moveaxis compositeimplicitautograd dispatch.h
moveaxis_native.h
moveaxis ops.h
movedim.h
movedim compositeimplicitautograd dispatch.h
movedim_native.h
movedim ops.h
mps_convolution_backward.h
mps convolution backward compositeexplicitautograd dispatch.h
mps_convolution_backward_native.h
mps convolution backward ops.h
{\tt mps\_convolution\_transpose\_backward.h}
mps convolution transpose backward compositeexplicitautograd dispatch.h
mps_convolution_transpose_backward_native.h
mps_convolution_transpose_backward_ops.h
mse loss.h
mse_loss_backward.h
mse loss backward cpu dispatch.h
mse_loss_backward_cuda_dispatch.h
mse_loss_backward_native.h
mse_loss_backward_ops.h
mse loss compositeexplicitautogradnonfunctional dispatch.h
mse_loss_cpu_dispatch.h
mse loss cuda dispatch.h
```

```
mse_loss_meta.h
mse loss meta dispatch.h
mse_loss_native.h
mse loss ops.h
msort.h
msort compositeimplicitautograd dispatch.h
msort_native.h
msort_ops.h
mT.h
mT_compositeimplicitautograd_dispatch.h
mT native.h
mT_ops.h
mul.h
multilabel_margin_loss.h
multilabel margin loss backward.h
multilabel_margin_loss_backward_cpu_dispatch.h
multilabel margin loss backward cuda dispatch.h
multilabel_margin_loss_backward_native.h
multilabel margin loss backward ops.h
multilabel_margin_loss_compositeimplicitautograd_dispatch.h
multilabel margin loss forward.h
multilabel_margin_loss_forward_cpu_dispatch.h
multilabel margin loss forward cuda dispatch.h
multilabel_margin_loss_forward_native.h
multilabel_margin_loss_forward_ops.h
multilabel margin loss native.h
multilabel_margin_loss_ops.h
multinomial.h
multinomial_cpu_dispatch.h
multinomial cuda dispatch.h
multinomial_native.h
multinomial ops.h
multiply.h
multiply compositeimplicitautograd dispatch.h
multiply_native.h
multiply ops.h
multi_margin_loss.h
multi margin loss backward.h
multi_margin_loss_backward_cpu_dispatch.h
multi margin loss backward cuda dispatch.h
multi_margin_loss_backward_native.h
multi_margin_loss_backward_ops.h
multi_margin_loss_cpu_dispatch.h
multi_margin_loss_cuda_dispatch.h
multi margin loss native.h
multi_margin_loss_ops.h
mul compositeexplicitautogradnonfunctional dispatch.h
mul_compositeexplicitautograd_dispatch.h
mul cpu dispatch.h
mul_cuda_dispatch.h
mul meta.h
```

```
mul_meta_dispatch.h
mul native.h
mul_ops.h
mv.h
mvlgamma.h
mvlgamma compositeexplicitautograd dispatch.h
mvlgamma_cpu_dispatch.h
mvlgamma_cuda_dispatch.h
mvlgamma native.h
mvlgamma_ops.h
mv compositeexplicitautograd dispatch.h
mv_native.h
mv ops.h
nanmean.h
nanmean compositeimplicitautograd dispatch.h
nanmean_native.h
nanmean ops.h
nanmedian.h
nanmedian compositeexplicitautograd dispatch.h
nanmedian_compositeimplicitautograd_dispatch.h
nanmedian cpu dispatch.h
nanmedian_cuda_dispatch.h
nanmedian native.h
nanmedian_ops.h
nanquantile.h
nanquantile compositeimplicitautograd dispatch.h
nanquantile_native.h
nanquantile ops.h
nansum.h
nansum cpu dispatch.h
nansum_cuda_dispatch.h
nansum native.h
nansum_ops.h
nan to num.h
nan_to_num_compositeexplicitautograd_dispatch.h
nan to num cpu dispatch.h
nan_to_num_cuda_dispatch.h
nan to num native.h
nan_to_num_ops.h
narrow.h
narrow_compositeimplicitautograd_dispatch.h
narrow_copy.h
narrow copy compositeexplicitautogradnonfunctional dispatch.h
narrow_copy_cpu_dispatch.h
narrow copy native.h
narrow_copy_ops.h
narrow native.h
narrow_ops.h
native batch norm.h
native_batch_norm_backward.h
native batch norm backward compositeexplicitautograd dispatch.h
```

```
native_batch_norm_backward_cpu_dispatch.h
native batch norm backward cuda dispatch.h
native_batch_norm_backward_native.h
native batch norm backward ops.h
native_batch_norm_cpu_dispatch.h
native batch norm cuda dispatch.h
native_batch_norm_native.h
native batch norm ops.h
native channel shuffle.h
native_channel_shuffle_compositeimplicitautograd_dispatch.h
native channel shuffle cpu dispatch.h
native_channel_shuffle_native.h
native channel shuffle ops.h
native_dropout.h
native dropout backward.h
native_dropout_backward_compositeexplicitautograd_dispatch.h
native dropout backward cpu dispatch.h
native_dropout_backward_cuda_dispatch.h
native dropout backward native.h
native_dropout_backward_ops.h
native dropout compositeexplicitautograd dispatch.h
native_dropout_cpu_dispatch.h
native dropout cuda dispatch.h
native_dropout_native.h
native dropout ops.h
native group norm.h
native_group_norm_backward.h
native group norm backward compositeexplicitautograd dispatch.h
native_group_norm_backward_cpu_dispatch.h
native group norm backward cuda dispatch.h
native_group_norm_backward_native.h
native_group_norm_backward_ops.h
native_group_norm_compositeexplicitautograd_dispatch.h
native group norm cpu dispatch.h
native_group_norm_cuda_dispatch.h
native group norm native.h
native_group_norm_ops.h
native layer norm.h
native_layer_norm_backward.h
native layer norm backward compositeexplicitautograd dispatch.h
native_layer_norm_backward_cpu_dispatch.h
native_layer_norm_backward_cuda_dispatch.h
native_layer_norm_backward_native.h
native_layer_norm_backward_ops.h
native layer norm compositeexplicitautograd dispatch.h
native_layer_norm_cpu_dispatch.h
native_layer_norm_cuda_dispatch.h
native_layer_norm_native.h
native layer norm ops.h
native_norm.h
native norm compositeexplicitautograd dispatch.h
```

```
native_norm_native.h
native norm ops.h
ne.h
neg.h
negative.h
negative compositeimplicitautograd dispatch.h
negative_native.h
negative ops.h
neg compositeexplicitautogradnonfunctional dispatch.h
neg_cpu_dispatch.h
neg cuda dispatch.h
neg_meta.h
neg_meta_dispatch.h
neg_native.h
neg ops.h
nested_to_padded_tensor.h
nested_to_padded_tensor_compositeimplicitautograd_dispatch.h
nested_to_padded_tensor_native.h
nested to padded tensor ops.h
new_empty.h
new empty compositeexplicitautograd dispatch.h
new_empty_native.h
new empty ops.h
new_empty_strided.h
new empty strided compositeexplicitautogradnonfunctional dispatch.h
new empty strided compositeexplicitautograd dispatch.h
new_empty_strided_native.h
new empty strided ops.h
new_full.h
new full compositeexplicitautograd dispatch.h
new_full_native.h
new full ops.h
new_ones.h
new ones compositeexplicitautograd dispatch.h
new_ones_native.h
new ones ops.h
new_zeros.h
new zeros compositeexplicitautograd dispatch.h
new_zeros_native.h
new zeros ops.h
nextafter.h
{\tt nextafter\_composite explicit autograd nonfunctional\_dispatch.h}
nextafter_cpu_dispatch.h
nextafter_cuda_dispatch.h
nextafter meta.h
nextafter_meta_dispatch.h
nextafter native.h
nextafter_ops.h
ne compositeexplicitautogradnonfunctional dispatch.h
ne_cpu_dispatch.h
ne cuda dispatch.h
```

```
ne_meta.h
ne meta dispatch.h
ne_native.h
ne ops.h
nll_loss.h
nll loss2d.h
nll_loss2d_backward.h
nll loss2d backward cpu dispatch.h
nll_loss2d_backward_cuda_dispatch.h
nll_loss2d_backward_native.h
nll loss2d backward ops.h
nll_loss2d_compositeimplicitautograd_dispatch.h
nll loss2d forward.h
nll_loss2d_forward_cpu_dispatch.h
nll loss2d forward cuda dispatch.h
nll_loss2d_forward_native.h
nll loss2d forward ops.h
nll_loss2d_native.h
nll loss2d ops.h
nll_loss_backward.h
nll loss backward compositeexplicitautogradnonfunctional dispatch.h
nll_loss_backward_cpu_dispatch.h
nll loss backward cuda dispatch.h
nll_loss_backward_meta.h
nll loss backward meta dispatch.h
nll loss backward native.h
nll_loss_backward_ops.h
nll loss compositeimplicitautograd dispatch.h
nll_loss_forward.h
nll loss forward compositeexplicitautogradnonfunctional dispatch.h
nll_loss_forward_cpu_dispatch.h
nll_loss_forward_cuda_dispatch.h
nll_loss_forward_meta.h
nll_loss_forward_meta_dispatch.h
nll_loss_forward_native.h
nll loss forward ops.h
nll_loss_native.h
nll loss nd.h
\verb|nll_loss_nd_composite implicit autograd_dispatch.h|
nll loss nd native.h
nll_loss_nd_ops.h
nll_loss_ops.h
nonzero.h
nonzero_cpu_dispatch.h
nonzero cuda dispatch.h
nonzero_native.h
nonzero numpy.h
nonzero_numpy_compositeimplicitautograd_dispatch.h
nonzero numpy native.h
nonzero_numpy_ops.h
nonzero ops.h
```

```
nonzero_static.h
nonzero static cpu dispatch.h
nonzero_static_cuda_dispatch.h
nonzero static native.h
nonzero_static_ops.h
norm.h
normal.h
normal_compositeexplicitautograd_dispatch.h
normal_cpu_dispatch.h
normal_cuda_dispatch.h
normal meta dispatch.h
normal_native.h
normal ops.h
\verb|norm_composite explicit autograd nonfunctional_dispatch.h|
norm compositeexplicitautograd dispatch.h
norm_compositeimplicitautograd_dispatch.h
norm cpu dispatch.h
norm_cuda_dispatch.h
norm except dim.h
norm_except_dim_compositeimplicitautograd_dispatch.h
norm except dim native.h
norm_except_dim_ops.h
norm meta.h
norm_meta_dispatch.h
norm native.h
norm ops.h
not_equal.h
not equal compositeimplicitautograd dispatch.h
not_equal_native.h
not equal ops.h
nuclear_norm.h
nuclear_norm_compositeimplicitautograd_dispatch.h
nuclear_norm_native.h
nuclear norm ops.h
numpy_T.h
numpy T compositeimplicitautograd dispatch.h
numpy_T_native.h
numpy T ops.h
ones.h
ones compositeexplicitautograd dispatch.h
ones_like.h
ones_like_compositeexplicitautograd_dispatch.h
ones like native.h
ones_like_ops.h
ones native.h
ones_ops.h
one hot.h
one_hot_compositeimplicitautograd_dispatch.h
one hot native.h
one_hot_ops.h
or.h
```

```
orgqr.h
orgqr compositeimplicitautograd dispatch.h
orgqr_native.h
orgqr ops.h
ormqr.h
ormqr cpu dispatch.h
ormqr_cuda_dispatch.h
ormqr native.h
ormqr_ops.h
or_compositeimplicitautograd_dispatch.h
or native.h
or_ops.h
outer.h
\verb"outer_compositeimplicitautograd_dispatch.h"
outer native.h
outer_ops.h
output nr.h
output_nr_compositeimplicitautograd_dispatch.h
output nr native.h
output_nr_ops.h
\verb"pad_compositeimplicitautograd_dispatch.h"
pad native.h
pad_ops.h
pad sequence.h
pad_sequence_compositeimplicitautograd_dispatch.h
pad_sequence_native.h
pad sequence ops.h
pairwise_distance.h
pairwise distance compositeimplicitautograd dispatch.h
pairwise_distance_native.h
pairwise distance ops.h
pdist.h
pdist compositeimplicitautograd dispatch.h
pdist_native.h
pdist ops.h
permute.h
permute compositeexplicitautograd dispatch.h
permute_copy.h
permute copy compositeexplicitautogradnonfunctional dispatch.h
permute_copy_compositeexplicitautograd_dispatch.h
permute_copy_native.h
permute_copy_ops.h
permute_native.h
permute ops.h
pinverse.h
pinverse compositeimplicitautograd dispatch.h
pinverse_native.h
pinverse ops.h
pin_memory.h
pin memory compositeimplicitautograd dispatch.h
```

```
pin_memory_native.h
pin memory ops.h
pixel_shuffle.h
pixel shuffle compositeexplicitautogradnonfunctional dispatch.h
pixel_shuffle_compositeexplicitautograd_dispatch.h
pixel shuffle cpu dispatch.h
pixel_shuffle_native.h
pixel shuffle ops.h
pixel_unshuffle.h
\verb|pixel_unshuffle_composite explicit autograd nonfunctional_dispatch.h|
pixel unshuffle compositeexplicitautograd dispatch.h
pixel_unshuffle_cpu_dispatch.h
pixel unshuffle native.h
pixel_unshuffle_ops.h
poisson.h
poisson_compositeexplicitautograd_dispatch.h
poisson cpu dispatch.h
poisson_cuda_dispatch.h
poisson native.h
poisson_nll_loss.h
poisson nll loss compositeimplicitautograd dispatch.h
poisson_nll_loss_native.h
poisson nll loss ops.h
poisson_ops.h
polar.h
polar_compositeexplicitautograd_dispatch.h
polar_cpu_dispatch.h
polar cuda dispatch.h
polar_native.h
polar ops.h
polygamma.h
polygamma compositeexplicitautogradnonfunctional dispatch.h
polygamma_compositeexplicitautograd_dispatch.h
polygamma cpu dispatch.h
polygamma_cuda_dispatch.h
polygamma meta.h
polygamma_meta_dispatch.h
polygamma native.h
polygamma_ops.h
positive.h
positive_compositeimplicitautograd_dispatch.h
positive_native.h
positive_ops.h
pow compositeexplicitautogradnonfunctional dispatch.h
pow_cpu_dispatch.h
pow cuda dispatch.h
pow_meta.h
pow meta dispatch.h
pow_native.h
pow ops.h
```

```
prelu.h
prelu compositeimplicitautograd dispatch.h
prelu_native.h
prelu ops.h
prod.h
prod compositeexplicitautogradnonfunctional dispatch.h
\verb|prod_compositeexplicitautograd_dispatch.h|
prod compositeimplicitautograd dispatch.h
prod cpu dispatch.h
prod_cuda_dispatch.h
prod meta.h
prod_meta_dispatch.h
prod native.h
prod_ops.h
promote types.h
promote_types_compositeimplicitautograd_dispatch.h
promote types native.h
promote_types_ops.h
put_compositeexplicitautograd_dispatch.h
put cpu dispatch.h
put_cuda_dispatch.h
put meta dispatch.h
put_native.h
put ops.h
gr.h
qr_compositeimplicitautograd_dispatch.h
qr native.h
qr_ops.h
gscheme.h
qscheme_native.h
qscheme ops.h
quantile.h
quantile compositeimplicitautograd dispatch.h
quantile_native.h
quantile ops.h
quantized_batch_norm.h
quantized batch norm compositeexplicitautograd dispatch.h
quantized_batch_norm_native.h
quantized batch norm ops.h
quantized_gru_cell.h
quantized_gru_cell_compositeimplicitautograd_dispatch.h
quantized_gru_cell_native.h
quantized_gru_cell_ops.h
quantized 1stm cell.h
quantized_lstm_cell_compositeimplicitautograd_dispatch.h
quantized_lstm_cell_native.h
quantized_lstm_cell_ops.h
quantized max poolld.h
quantized_max_pool1d_compositeexplicitautograd_dispatch.h
quantized max poolld native.h
```

```
quantized_max_pool1d_ops.h
            quantized max pool2d.h
            quantized_max_pool2d_compositeexplicitautograd_dispatch.h
            quantized max pool2d native.h
            quantized_max_pool2d_ops.h
            quantized max pool3d.h
            quantized_max_pool3d_compositeexplicitautograd_dispatch.h
            quantized max pool3d native.h
            quantized max pool3d ops.h
            quantized_rnn_relu_cell.h
            quantized rnn relu cell compositeimplicitautograd dispatch.h
            quantized_rnn_relu_cell_native.h
            quantized rnn relu cell ops.h
            quantized_rnn_tanh_cell.h
            quantized rnn tanh cell compositeimplicitautograd dispatch.h
            quantized_rnn_tanh_cell_native.h
            quantized rnn tanh cell ops.h
            quantize_per_channel.h
            quantize per channel compositeexplicitautograd dispatch.h
            quantize_per_channel_cpu_dispatch.h
            quantize per channel cuda dispatch.h
            quantize_per_channel_native.h
            quantize per channel ops.h
            quantize_per_tensor.h
            quantize per tensor compositeexplicitautograd dispatch.h
            quantize per tensor cpu dispatch.h
            quantize_per_tensor_cuda_dispatch.h
            quantize per tensor dynamic.h
            quantize_per_tensor_dynamic_compositeexplicitautograd_dispatch.h
            quantize per tensor dynamic cpu dispatch.h
            quantize_per_tensor_dynamic_cuda_dispatch.h
            quantize per tensor dynamic native.h
            quantize_per_tensor_dynamic_ops.h
            quantize per tensor native.h
            quantize_per_tensor_ops.h
            q per channel axis.h
            q_per_channel_axis_native.h
            q per channel axis ops.h
            q_per_channel_scales.h
            q per channel scales compositeexplicitautograd dispatch.h
            q_per_channel_scales_native.h
            q_per_channel_scales_ops.h
            q_per_channel_zero_points.h
            \verb|q_per_channel_zero_points_composite explicit autograd_dispatch.h|
            q_per_channel_zero_points_native.h
            q_per_channel_zero_points_ops.h
            q scale.h
            q_scale_native.h
-
            q scale ops.h
            q_zero_point.h
            q zero point native.h
```

```
q_zero_point_ops.h
rad2deg.h
rad2deg_compositeexplicitautograd_dispatch.h
rad2deg native.h
rad2deg_ops.h
rand.h
randint.h
randint compositeexplicitautograd dispatch.h
randint like.h
randint_like_compositeexplicitautograd_dispatch.h
randint like native.h
randint_like_ops.h
randint native.h
randint_ops.h
randn.h
randn_compositeexplicitautograd_dispatch.h
randn compositeimplicitautograd dispatch.h
randn_like.h
randn like compositeexplicitautograd dispatch.h
randn_like_compositeimplicitautogradnestedtensor_dispatch.h
randn like native.h
randn_like_ops.h
randn native.h
randn_ops.h
random.h
random compositeexplicitautograd dispatch.h
random_cpu_dispatch.h
random cuda dispatch.h
random_meta_dispatch.h
random native.h
random_ops.h
randperm.h
randperm_compositeexplicitautograd_dispatch.h
randperm cpu dispatch.h
randperm_cuda_dispatch.h
randperm native.h
randperm_ops.h
rand compositeexplicitautograd dispatch.h
rand_compositeimplicitautograd_dispatch.h
rand like.h
rand_like_compositeexplicitautograd_dispatch.h
rand_like_native.h
rand_like_ops.h
rand native.h
rand ops.h
range.h
range_compositeexplicitautograd_dispatch.h
range_cpu_dispatch.h
range cuda dispatch.h
range_meta_dispatch.h
range native.h
```

```
range_ops.h
ravel.h
ravel_compositeimplicitautograd_dispatch.h
ravel native.h
ravel_ops.h
real.h
real_compositeimplicitautograd_dispatch.h
real native.h
real_ops.h
reciprocal.h
reciprocal compositeexplicitautogradnonfunctional dispatch.h
reciprocal_cpu_dispatch.h
reciprocal cuda dispatch.h
reciprocal_meta.h
reciprocal meta dispatch.h
reciprocal_native.h
reciprocal ops.h
record_stream.h
record stream cuda dispatch.h
record_stream_native.h
record stream ops.h
refine_names.h
refine names compositeimplicitautograd dispatch.h
refine_names_native.h
refine names ops.h
reflection_padld.h
reflection_padld_backward.h
reflection padld backward compositeexplicitautogradnonfunctional dispatch.h
reflection_padld_backward_cpu_dispatch.h
reflection padld backward cuda dispatch.h
reflection_padld_backward_meta.h
reflection_padld_backward_meta_dispatch.h
reflection_padld_backward_native.h
reflection padld backward ops.h
reflection_padld_compositeexplicitautogradnonfunctional_dispatch.h
reflection padld cpu dispatch.h
reflection_pad1d_cuda_dispatch.h
reflection padld meta.h
reflection_padld_meta_dispatch.h
reflection padld native.h
reflection_padld_ops.h
reflection_pad2d.h
reflection_pad2d_backward.h
reflection_pad2d_backward_cpu_dispatch.h
reflection pad2d backward cuda dispatch.h
reflection_pad2d_backward_native.h
reflection_pad2d_backward_ops.h
reflection_pad2d_cpu_dispatch.h
reflection pad2d cuda dispatch.h
reflection_pad2d_native.h
reflection pad2d ops.h
```

```
reflection_pad3d.h
                    reflection pad3d backward.h
                    reflection_pad3d_backward_compositeexplicitautogradnonfunctional_dispatch.h
                    reflection pad3d backward cpu dispatch.h
                    reflection_pad3d_backward_cuda_dispatch.h
                    reflection pad3d backward meta.h
                    reflection_pad3d_backward_meta_dispatch.h
                    reflection pad3d backward native.h
                    reflection_pad3d_backward_ops.h
                    reflection_pad3d_compositeexplicitautogradnonfunctional_dispatch.h
                    reflection pad3d cpu dispatch.h
                    reflection_pad3d_cuda_dispatch.h
                    reflection_pad3d_meta.h
                    reflection_pad3d_meta_dispatch.h
                    reflection pad3d native.h
                    reflection_pad3d_ops.h
                    relu.h
                    relu6.h
                    relu6 compositeimplicitautograd dispatch.h
                    relu6_native.h
                    relu6 ops.h
                    {\tt relu\_composite explicit autograd\_dispatch.h}
                    relu cpu dispatch.h
                    relu_cuda_dispatch.h
                    relu meta dispatch.h
                    relu_native.h
                    relu_ops.h
                    remainder.h
                    remainder\_composite explicit autograd non functional\_dispatch.h
                    remainder compositeexplicitautograd dispatch.h
                    remainder_cpu_dispatch.h
                    remainder cuda dispatch.h
                    remainder_meta.h
                    remainder meta dispatch.h
                    remainder_native.h
                    remainder ops.h
                    rename.h
                    rename compositeimplicitautograd dispatch.h
                    rename_native.h
                    rename ops.h
                    renorm.h
                    renorm_compositeexplicitautogradnonfunctional_dispatch.h
                    renorm_cpu_dispatch.h
                    renorm_cuda_dispatch.h
                    renorm meta.h
                    renorm_meta_dispatch.h
                    renorm native.h
                    renorm_ops.h
1
                    repeat.h
                    repeat_compositeexplicitautograd_dispatch.h
                    repeat interleave.h
```

```
repeat_interleave_compositeexplicitautograd_dispatch.h
repeat interleave compositeimplicitautograd dispatch.h
repeat_interleave_cpu_dispatch.h
repeat interleave cuda dispatch.h
repeat_interleave_native.h
repeat interleave ops.h
repeat_native.h
repeat ops.h
replication padld.h
replication_padld_backward.h
replication padld backward compositeexplicitautogradnonfunctional dispatch.h
replication_padld_backward_cpu_dispatch.h
replication padld backward cuda dispatch.h
replication_padld_backward_meta.h
replication padld backward meta dispatch.h
replication_pad1d_backward_native.h
replication padld backward ops.h
replication_padld_compositeexplicitautogradnonfunctional_dispatch.h
replication padld cpu dispatch.h
replication_padld_cuda_dispatch.h
replication padld meta.h
replication_pad1d_meta_dispatch.h
replication padld native.h
replication_pad1d_ops.h
replication pad2d.h
replication pad2d backward.h
replication_pad2d_backward_cpu_dispatch.h
replication pad2d backward cuda dispatch.h
replication_pad2d_backward_native.h
replication pad2d backward ops.h
replication_pad2d_compositeexplicitautogradnonfunctional_dispatch.h
replication pad2d cpu dispatch.h
replication_pad2d_cuda_dispatch.h
replication pad2d meta.h
replication_pad2d_meta_dispatch.h
replication pad2d native.h
replication_pad2d_ops.h
replication pad3d.h
replication_pad3d_backward.h
replication pad3d backward cpu dispatch.h
replication_pad3d_backward_cuda_dispatch.h
replication_pad3d_backward_native.h
replication_pad3d_backward_ops.h
\verb|replication_pad3d_composite explicit autograd nonfunctional_dispatch.h|
replication pad3d cpu dispatch.h
replication_pad3d_cuda_dispatch.h
replication pad3d meta.h
replication_pad3d_meta_dispatch.h
replication pad3d native.h
replication_pad3d_ops.h
requires grad.h
```

```
requires\_grad\_compositeimplicitautograd\_dispatch.h
            requires grad native.h
            requires_grad_ops.h
            reshape.h
            reshape_as.h
            reshape as compositeimplicitautogradnestedtensor dispatch.h
            reshape_as_compositeimplicitautograd_dispatch.h
            reshape as native.h
            reshape_as_ops.h
            reshape_compositeimplicitautogradnestedtensor_dispatch.h
            reshape compositeimplicitautograd dispatch.h
            reshape_native.h
            reshape ops.h
            resize.h
            resize as.h
            resize_as_compositeexplicitautograd_dispatch.h
            resize as native.h
            resize_as_ops.h
            resize as sparse.h
            resize_as_sparse_compositeexplicitautograd_dispatch.h
            resize as sparse meta dispatch.h
            resize_as_sparse_native.h
            resize as sparse ops.h
            \verb"resize_composite explicit autograd_dispatch.h"
            resize cpu dispatch.h
            resize_cuda_dispatch.h
            resize_meta_dispatch.h
            resize native.h
            resize_ops.h
            resolve conj.h
            resolve_conj_compositeimplicitautograd_dispatch.h
            resolve conj native.h
            resolve_conj_ops.h
            resolve neg.h
            resolve_neg_compositeimplicitautograd_dispatch.h
            resolve neg native.h
            resolve_neg_ops.h
            result type.h
            {\tt result\_type\_compositeimplicitautograd\_dispatch.h}
            result type native.h
            result_type_ops.h
            retains_grad.h
            retains_grad_compositeimplicitautograd_dispatch.h
            retains_grad_native.h
            retains grad ops.h
            retain_grad.h
            retain_grad_compositeimplicitautograd_dispatch.h
            retain_grad_native.h
-
            retain grad ops.h
            rms_norm.h
            rms norm compositeimplicitautograd dispatch.h
```

```
rms_norm_native.h
            rms norm ops.h
            rnn_relu.h
            rnn relu cell.h
            rnn_relu_cell_compositeimplicitautograd_dispatch.h
            rnn relu cell native.h
            rnn_relu_cell_ops.h
            rnn relu compositeimplicitautograd dispatch.h
            rnn_relu_native.h
            rnn relu ops.h
            rnn tanh.h
            rnn_tanh_cell.h
            rnn tanh cell compositeimplicitautograd dispatch.h
            rnn_tanh_cell_native.h
            rnn tanh cell ops.h
            rnn_tanh_compositeimplicitautograd_dispatch.h
            rnn tanh native.h
            rnn_tanh_ops.h
            roll.h
            roll_compositeexplicitautograd_dispatch.h
            roll cpu dispatch.h
            roll_cuda_dispatch.h
            roll native.h
            roll_ops.h
            rot90.h
            rot90_compositeexplicitautograd_dispatch.h
            rot90_native.h
            rot90 ops.h
            round.h
            round compositeexplicitautogradnonfunctional dispatch.h
            round_cpu_dispatch.h
            round cuda dispatch.h
            round_meta.h
            round meta dispatch.h
            round_native.h
            round ops.h
            row_indices.h
            row indices compositeexplicitautograd dispatch.h
            row_indices_copy.h
            row indices copy compositeexplicitautogradnonfunctional dispatch.h
            \verb"row_indices_copy_composite explicit autograd_dispatch.h"
            row_indices_copy_native.h
            row_indices_copy_ops.h
            row_indices_native.h
            row_indices_ops.h
            row_stack.h
            row_stack_compositeimplicitautograd_dispatch.h
            row_stack_native.h
-
            row stack ops.h
            rrelu.h
            rrelu compositeimplicitautograd dispatch.h
```

```
rrelu_native.h
rrelu ops.h
rrelu_with_noise.h
rrelu with noise backward.h
rrelu_with_noise_backward_compositeexplicitautograd_dispatch.h
rrelu with noise backward native.h
rrelu_with_noise_backward_ops.h
rrelu with noise compositeexplicitautograd dispatch.h
rrelu_with_noise_cpu_dispatch.h
rrelu_with_noise_cuda_dispatch.h
rrelu with noise meta dispatch.h
rrelu_with_noise_native.h
rrelu with noise ops.h
rshift.h
rshift compositeexplicitautograd dispatch.h
rshift_cpu_dispatch.h
rshift cuda dispatch.h
rshift_meta_dispatch.h
rshift native.h
rshift_ops.h
rsqrt.h
\verb|rsqrt_composite explicit autograd nonfunctional_dispatch.h|
rsqrt cpu dispatch.h
rsqrt_cuda_dispatch.h
rsqrt meta.h
rsqrt_meta_dispatch.h
rsqrt_native.h
rsqrt ops.h
rsub.h
rsub compositeexplicitautograd dispatch.h
rsub_cpu_dispatch.h
rsub cuda dispatch.h
rsub_native.h
rsub ops.h
scalar_tensor.h
scalar tensor compositeexplicitautograd dispatch.h
scalar_tensor_native.h
scalar tensor ops.h
scaled_dot_product_attention.h
scaled dot product attention compositeimplicitautograd dispatch.h
scaled_dot_product_attention_native.h
scaled_dot_product_attention_ops.h
scatter.h
scatter add.h
scatter add compositeexplicitautogradnonfunctional dispatch.h
scatter_add_compositeimplicitautograd_dispatch.h
scatter_add_cpu_dispatch.h
scatter_add_cuda_dispatch.h
scatter add meta.h
scatter_add_meta_dispatch.h
scatter add native.h
```

```
scatter_add_ops.h
scatter compositeexplicitautogradnonfunctional dispatch.h
scatter_compositeimplicitautograd_dispatch.h
scatter cpu dispatch.h
scatter_cuda_dispatch.h
scatter meta.h
scatter_meta_dispatch.h
scatter_native.h
scatter ops.h
scatter_reduce.h
scatter reduce compositeexplicitautogradnonfunctional dispatch.h
scatter_reduce_cpu_dispatch.h
scatter reduce cuda dispatch.h
scatter_reduce_meta.h
scatter_reduce_meta_dispatch.h
scatter_reduce_native.h
scatter reduce ops.h
searchsorted.h
searchsorted cpu dispatch.h
searchsorted_cuda_dispatch.h
searchsorted native.h
searchsorted_ops.h
segment reduce.h
\verb|segment_reduce_composite explicit autograd_dispatch.h|
segment_reduce_cpu_dispatch.h
segment_reduce_cuda_dispatch.h
segment_reduce_native.h
segment reduce ops.h
select.h
select backward.h
\verb|select_backward_composite explicit autograd nonfunctional_dispatch.h|
select backward compositeexplicitautograd dispatch.h
select_backward_native.h
select backward ops.h
select_compositeexplicitautograd_dispatch.h
select compositeimplicitautograd dispatch.h
select_copy.h
select copy compositeexplicitautogradnonfunctional dispatch.h
select_copy_compositeexplicitautograd_dispatch.h
select copy native.h
select_copy_ops.h
select_native.h
select ops.h
select_scatter.h
select scatter compositeexplicitautogradnonfunctional dispatch.h
select_scatter_compositeexplicitautograd_dispatch.h
select scatter native.h
select_scatter_ops.h
selu.h
selu_compositeimplicitautograd_dispatch.h
selu native.h
```

```
selu_ops.h
set.h
set_compositeexplicitautograd_dispatch.h
set compositeimplicitautograd dispatch.h
set_cpu_dispatch.h
set cuda dispatch.h
set_data.h
set data compositeimplicitautograd dispatch.h
set data native.h
set_data_ops.h
set meta dispatch.h
set_native.h
set ops.h
sgn.h
sgn compositeexplicitautogradnonfunctional dispatch.h
sgn_cpu_dispatch.h
sgn cuda dispatch.h
sgn_meta.h
sgn meta dispatch.h
sgn_native.h
sgn ops.h
sigmoid.h
sigmoid backward.h
\verb|sigmoid_backward_composite explicit autograd nonfunctional_dispatch.h|
sigmoid backward cpu dispatch.h
sigmoid backward cuda dispatch.h
sigmoid_backward_meta.h
sigmoid backward meta dispatch.h
sigmoid_backward_native.h
sigmoid backward ops.h
\verb|sigmoid_composite explicit autograd nonfunctional_dispatch.h|
sigmoid cpu dispatch.h
sigmoid_cuda_dispatch.h
sigmoid meta.h
sigmoid_meta_dispatch.h
sigmoid native.h
sigmoid_ops.h
sign.h
signbit.h
signbit compositeexplicitautogradnonfunctional dispatch.h
signbit_cpu_dispatch.h
signbit_cuda_dispatch.h
signbit_meta.h
signbit_meta_dispatch.h
signbit native.h
signbit_ops.h
\verb|sign_composite explicit autograd nonfunctional_dispatch.h|
sign_cpu_dispatch.h
sign cuda dispatch.h
sign_meta.h
sign meta dispatch.h
```

```
sign_native.h
            sign ops.h
            silu.h
            silu backward.h
            \verb|silu_backward_composite explicit autograd nonfunctional_dispatch.h|
            silu backward compositeimplicitautograd dispatch.h
            silu_backward_cpu_dispatch.h
            silu backward cuda dispatch.h
            silu backward meta.h
            silu_backward_meta_dispatch.h
            silu backward native.h
            silu_backward_ops.h
            silu compositeexplicitautogradnonfunctional dispatch.h
            silu_cpu_dispatch.h
            silu cuda dispatch.h
            silu_meta.h
            silu_meta_dispatch.h
            silu_native.h
            silu ops.h
            sin.h
            sinc.h
            \verb|sinc_composite explicit autograd nonfunctional_dispatch.h|
            sinc cpu dispatch.h
            sinc_cuda_dispatch.h
            sinc meta.h
            sinc_meta_dispatch.h
            sinc_native.h
            sinc ops.h
            sinh.h
            sinh compositeexplicitautogradnonfunctional dispatch.h
            sinh_cpu_dispatch.h
            sinh cuda dispatch.h
            sinh_meta.h
            sinh_meta_dispatch.h
            sinh_native.h
            sinh ops.h
            \verb|sin_composite explicit autograd nonfunctional_dispatch.h|
            sin cpu dispatch.h
            sin_cuda_dispatch.h
            sin meta.h
            sin_meta_dispatch.h
            sin_native.h
            sin_ops.h
            size.h
            size compositeimplicitautograd dispatch.h
            size_native.h
            size ops.h
            slice.h
-
            slice backward.h
            slice_backward_compositeexplicitautograd_dispatch.h
            slice backward native.h
```

```
slice_backward_ops.h
slice compositeexplicitautograd dispatch.h
slice copy.h
slice copy compositeexplicitautogradnonfunctional dispatch.h
slice_copy_compositeexplicitautograd_dispatch.h
slice copy native.h
slice_copy_ops.h
slice inverse.h
slice inverse compositeexplicitautograd dispatch.h
slice_inverse_native.h
slice inverse ops.h
slice_native.h
slice ops.h
slice_scatter.h
slice scatter compositeexplicitautogradnonfunctional dispatch.h
slice_scatter_compositeexplicitautograd_dispatch.h
slice scatter native.h
slice_scatter_ops.h
slogdet.h
slogdet_compositeimplicitautograd_dispatch.h
slogdet native.h
slogdet_ops.h
slow conv3d.h
slow_conv3d_compositeimplicitautograd_dispatch.h
slow conv3d forward.h
slow conv3d forward cpu dispatch.h
slow_conv3d_forward_native.h
slow conv3d forward ops.h
slow_conv3d_native.h
slow conv3d ops.h
slow_conv_dilated2d.h
slow conv dilated2d compositeexplicitautograd dispatch.h
slow_conv_dilated2d_cpu_dispatch.h
slow conv dilated2d cuda dispatch.h
slow_conv_dilated2d_native.h
slow conv dilated2d ops.h
slow_conv_dilated3d.h
slow conv dilated3d compositeexplicitautograd dispatch.h
slow_conv_dilated3d_cpu_dispatch.h
slow conv dilated3d cuda dispatch.h
slow_conv_dilated3d_native.h
slow_conv_dilated3d_ops.h
slow conv transpose2d.h
\verb|slow_conv_transpose2d_composite explicit autograd nonfunctional_dispatch.h|
slow conv transpose2d cpu dispatch.h
slow_conv_transpose2d_cuda_dispatch.h
slow_conv_transpose2d_meta.h
slow_conv_transpose2d_meta_dispatch.h
slow conv transpose2d native.h
slow_conv_transpose2d_ops.h
slow conv transpose3d.h
```

```
slow_conv_transpose3d_cpu_dispatch.h
slow conv transpose3d cuda dispatch.h
slow_conv_transpose3d_native.h
slow conv transpose3d ops.h
smm.h
smm compositeimplicitautograd dispatch.h
smm_native.h
smm ops.h
smooth 11 loss.h
smooth_11_loss_backward.h
smooth 11 loss backward compositeexplicitautograd dispatch.h
smooth_l1_loss_backward_cpu_dispatch.h
smooth 11 loss backward cuda dispatch.h
smooth_l1_loss_backward_native.h
smooth 11 loss backward ops.h
\verb|smooth_ll_loss_composite explicit autograd nonfunctional_dispatch.h|
smooth 11 loss cpu dispatch.h
smooth_11_loss_cuda_dispatch.h
smooth 11 loss meta.h
smooth_11_loss_meta_dispatch.h
smooth 11 loss native.h
smooth_11_loss_ops.h
softmax.h
softmax_compositeexplicitautograd_dispatch.h
softmax compositeimplicitautograd dispatch.h
softmax native.h
softmax_ops.h
softplus.h
softplus_backward.h
softplus backward compositeexplicitautogradnonfunctional dispatch.h
softplus_backward_cpu_dispatch.h
softplus backward cuda dispatch.h
softplus_backward_meta.h
softplus backward meta dispatch.h
softplus_backward_native.h
softplus backward ops.h
\verb|softplus_composite explicit autograd nonfunctional_dispatch.h|
softplus cpu dispatch.h
softplus_cuda_dispatch.h
softplus meta.h
softplus_meta_dispatch.h
softplus_native.h
softplus_ops.h
softshrink.h
softshrink backward.h
\verb|softshrink_backward_composite explicit autograd nonfunctional_dispatch.h|
softshrink_backward_cpu_dispatch.h
softshrink_backward_cuda_dispatch.h
softshrink backward meta.h
softshrink_backward_meta_dispatch.h
softshrink backward native.h
```

```
softshrink_backward_ops.h
softshrink compositeexplicitautogradnonfunctional dispatch.h
softshrink_cpu_dispatch.h
softshrink cuda dispatch.h
softshrink_meta.h
softshrink meta dispatch.h
softshrink_native.h
softshrink ops.h
soft margin loss.h
soft_margin_loss_backward.h
soft margin loss backward compositeexplicitautograd dispatch.h
soft_margin_loss_backward_native.h
soft margin loss backward ops.h
\verb|soft_margin_loss_composite explicit autograd_dispatch.h|
soft margin loss native.h
soft_margin_loss_ops.h
sort.h
\verb|sort_composite explicit autograd nonfunctional_dispatch.h|
sort compositeexplicitautograd dispatch.h
sort_compositeimplicitautograd_dispatch.h
sort cpu dispatch.h
sort_cuda_dispatch.h
sort meta.h
sort_meta_dispatch.h
sort native.h
sort ops.h
sparse_bsc_tensor.h
sparse bsc tensor compositeimplicitautograd dispatch.h
sparse_bsc_tensor_native.h
sparse bsc tensor ops.h
sparse_bsr_tensor.h
sparse bsr tensor compositeimplicitautograd dispatch.h
sparse_bsr_tensor_native.h
sparse bsr tensor ops.h
sparse_compressed_tensor.h
sparse compressed tensor compositeexplicitautograd dispatch.h
sparse_compressed_tensor_native.h
sparse compressed tensor ops.h
sparse_coo_tensor.h
sparse coo tensor compositeexplicitautograd dispatch.h
sparse_coo_tensor_compositeimplicitautograd_dispatch.h
sparse_coo_tensor_native.h
sparse_coo_tensor_ops.h
sparse_csc_tensor.h
sparse csc tensor compositeimplicitautograd dispatch.h
sparse_csc_tensor_native.h
sparse_csc_tensor_ops.h
sparse_csr_tensor.h
sparse csr tensor compositeimplicitautograd dispatch.h
sparse_csr_tensor_native.h
sparse csr tensor ops.h
```

```
sparse_dim.h
sparse dim compositeexplicitautograd dispatch.h
sparse_dim_native.h
sparse dim ops.h
sparse_mask.h
sparse mask compositeexplicitautograd dispatch.h
sparse_mask_native.h
sparse mask ops.h
sparse resize.h
sparse_resize_and_clear.h
sparse resize and clear compositeexplicitautograd dispatch.h
sparse_resize_and_clear_meta_dispatch.h
sparse resize and clear native.h
sparse_resize_and_clear_ops.h
sparse resize compositeexplicitautograd dispatch.h
sparse_resize_meta_dispatch.h
sparse resize native.h
sparse_resize_ops.h
sparse sampled addmm.h
sparse_sampled_addmm_native.h
sparse sampled addmm ops.h
special_airy_ai.h
special airy ai compositeexplicitautogradnonfunctional dispatch.h
special_airy_ai_cpu_dispatch.h
special airy ai cuda dispatch.h
special airy ai meta.h
special_airy_ai_meta_dispatch.h
special airy ai native.h
special_airy_ai_ops.h
special bessel jo.h
special_bessel_j0_compositeexplicitautogradnonfunctional_dispatch.h
special bessel j0 cpu dispatch.h
special_bessel_j0_cuda_dispatch.h
special bessel j0 meta.h
special_bessel_j0_meta_dispatch.h
special bessel j0 native.h
special_bessel_j0_ops.h
special bessel j1.h
\verb|special_bessel_j1_composite explicit autograd nonfunctional_dispatch.h|
special bessel j1 cpu dispatch.h
special_bessel_j1_cuda_dispatch.h
special_bessel_j1_meta.h
special_bessel_j1_meta_dispatch.h
special_bessel_j1_native.h
special bessel j1 ops.h
special_bessel_y0.h
\verb|special_bessel_y0_composite explicit autograd nonfunctional_dispatch.h|
special_bessel_y0_cpu_dispatch.h
special bessel y0 cuda dispatch.h
special_bessel_y0_meta.h
special bessel y0 meta dispatch.h
```

```
special_bessel_y0_native.h
special bessel y0 ops.h
special_bessel_y1.h
special bessel y1 compositeexplicitautogradnonfunctional dispatch.h
special_bessel_y1_cpu_dispatch.h
special bessel y1 cuda dispatch.h
special_bessel_y1_meta.h
special_bessel_y1_meta_dispatch.h
special bessel y1 native.h
special_bessel_y1_ops.h
special chebyshev polynomial t.h
special_chebyshev_polynomial_t_compositeexplicitautogradnonfunctional_dispatch.h
special chebyshev polynomial t compositeexplicitautograd dispatch.h
special_chebyshev_polynomial_t_cpu_dispatch.h
special chebyshev polynomial t cuda dispatch.h
special_chebyshev_polynomial_t_meta.h
special chebyshev polynomial t meta dispatch.h
special_chebyshev_polynomial_t_native.h
special chebyshev polynomial t ops.h
special_chebyshev_polynomial_u.h
special chebyshev polynomial u compositeexplicitautogradnonfunctional dispatch.h
special_chebyshev_polynomial_u_compositeexplicitautograd_dispatch.h
special chebyshev polynomial u cpu dispatch.h
special_chebyshev_polynomial_u_cuda_dispatch.h
special_chebyshev_polynomial_u_meta.h
special chebyshev polynomial u meta dispatch.h
special_chebyshev_polynomial_u_native.h
special chebyshev polynomial u ops.h
special_chebyshev_polynomial_v.h
special chebyshev polynomial v compositeexplicitautogradnonfunctional dispatch.h
special_chebyshev_polynomial_v_compositeexplicitautograd_dispatch.h
special chebyshev polynomial v cpu dispatch.h
special_chebyshev_polynomial_v_cuda_dispatch.h
special chebyshev polynomial v meta.h
special_chebyshev_polynomial_v_meta_dispatch.h
special chebyshev polynomial v native.h
special_chebyshev_polynomial_v_ops.h
special chebyshev polynomial w.h
\verb|special_chebyshev_polynomial_w_composite explicit autograd nonfunctional_dispatch.h|
special chebyshev polynomial w compositeexplicitautograd dispatch.h
special_chebyshev_polynomial_w_cpu_dispatch.h
special_chebyshev_polynomial_w_cuda_dispatch.h
special chebyshev polynomial w meta.h
special_chebyshev_polynomial_w_meta_dispatch.h
special chebyshev polynomial w native.h
special_chebyshev_polynomial_w_ops.h
special digamma.h
special_digamma_compositeimplicitautograd_dispatch.h
special digamma native.h
special_digamma_ops.h
special entr.h
```

```
\verb|special_entr_composite explicit autograd nonfunctional_dispatch.h|
special entr cpu dispatch.h
special_entr_cuda_dispatch.h
special entr meta.h
special_entr_meta_dispatch.h
special entr native.h
special_entr_ops.h
special erf.h
special erfc.h
special_erfcx.h
special erfcx compositeexplicitautogradnonfunctional dispatch.h
special_erfcx_cpu_dispatch.h
special erfcx cuda dispatch.h
special_erfcx_meta.h
special erfcx meta dispatch.h
special_erfcx_native.h
special erfcx ops.h
special_erfc_compositeimplicitautograd_dispatch.h
special erfc native.h
special_erfc_ops.h
special erfinv.h
{\tt special\_erfinv\_compositeimplicitautograd\_dispatch.h}
special erfinv native.h
special_erfinv_ops.h
special erf compositeimplicitautograd dispatch.h
special erf native.h
special_erf_ops.h
special exp2.h
special_exp2_compositeimplicitautograd_dispatch.h
special exp2 native.h
special_exp2_ops.h
special expit.h
special_expit_compositeimplicitautograd_dispatch.h
special expit native.h
special_expit_ops.h
special expm1.h
{\tt special\_expm1\_compositeimplicitautograd\_dispatch.h}
special expml native.h
special_expm1_ops.h
special gammainc.h
special_gammaincc.h
special_gammaincc_compositeimplicitautograd_dispatch.h
special_gammaincc_native.h
special_gammaincc_ops.h
special gammainc compositeimplicitautograd dispatch.h
special_gammainc_native.h
special_gammainc_ops.h
special_gammaln.h
special gammaln compositeimplicitautograd dispatch.h
special_gammaln_native.h
special gammaln ops.h
```

```
special_hermite_polynomial_h.h
special hermite polynomial he.h
special_hermite_polynomial_he_compositeexplicitautogradnonfunctional_dispatch.h
special hermite polynomial he compositeexplicitautograd dispatch.h
special_hermite_polynomial_he_cpu_dispatch.h
special hermite polynomial he cuda dispatch.h
special_hermite_polynomial_he_meta.h
special hermite polynomial he meta dispatch.h
special_hermite_polynomial_he_native.h
special_hermite_polynomial_he_ops.h
special hermite polynomial h compositeexplicitautogradnonfunctional dispatch.h
{\tt special\_hermite\_polynomial\_h\_composite explicit autograd\_dispatch.h}
special hermite polynomial h cpu dispatch.h
special_hermite_polynomial_h_cuda_dispatch.h
special hermite polynomial h meta.h
special_hermite_polynomial_h_meta_dispatch.h
special hermite polynomial h native.h
special_hermite_polynomial_h_ops.h
special i0.h
special_i0e.h
special i0e compositeexplicitautogradnonfunctional dispatch.h
special_i0e_cpu_dispatch.h
special i0e cuda dispatch.h
special_i0e_meta.h
special i0e meta dispatch.h
special_i0e_native.h
special_i0e_ops.h
special iO compositeimplicitautograd dispatch.h
special_i0_native.h
special i0 ops.h
special_i1.h
special ile.h
{\tt special\_ile\_composite explicit autograd nonfunctional\_dispatch.} h
special ile cpu dispatch.h
special_ile_cuda_dispatch.h
special ile meta.h
special_ile_meta_dispatch.h
special ile native.h
special_i1e_ops.h
special il compositeexplicitautogradnonfunctional dispatch.h
special_i1_cpu_dispatch.h
special_i1_cuda_dispatch.h
special_i1_meta.h
special_i1_meta_dispatch.h
special il native.h
special_i1_ops.h
special laguerre polynomial 1.h
\verb|special_laguerre_polynomial_l_composite explicit autograd nonfunctional_dispatch.h|
special_laguerre_polynomial_l_compositeexplicitautograd_dispatch.h
special_laguerre_polynomial_l_cpu_dispatch.h
special laguerre polynomial l cuda dispatch.h
```

```
special_laguerre_polynomial_l_meta.h
special laguerre polynomial 1 meta dispatch.h
special_laguerre_polynomial_l_native.h
special laguerre polynomial l ops.h
special_legendre_polynomial_p.h
special legendre polynomial p compositeexplicitautogradnonfunctional dispatch.h
special_legendre_polynomial_p_compositeexplicitautograd_dispatch.h
special legendre polynomial p cpu dispatch.h
special legendre polynomial p cuda dispatch.h
special_legendre_polynomial_p_meta.h
special legendre polynomial p meta dispatch.h
special_legendre_polynomial_p_native.h
special legendre polynomial p ops.h
special_log1p.h
special_log1p_compositeimplicitautograd dispatch.h
special_log1p_native.h
special log1p ops.h
special_logit.h
special logit compositeimplicitautograd dispatch.h
special_logit_native.h
special logit ops.h
special_logsumexp.h
special logsumexp compositeimplicitautograd dispatch.h
special_logsumexp_native.h
special logsumexp ops.h
special log ndtr.h
\verb|special_log_ndtr_composite explicit autograd nonfunctional_dispatch.h|
special log ndtr cpu dispatch.h
special_log_ndtr_cuda_dispatch.h
special log ndtr meta.h
special_log_ndtr_meta_dispatch.h
special log ndtr native.h
special_log_ndtr_ops.h
special log softmax.h
special_log_softmax_compositeimplicitautograd_dispatch.h
special log softmax native.h
special_log_softmax_ops.h
special modified bessel i0.h
\verb|special_modified_bessel_i0_composite explicit autograd non functional_dispatch.h|
special modified bessel i0 cpu dispatch.h
special_modified_bessel_i0_cuda_dispatch.h
special_modified_bessel_i0_meta.h
special_modified_bessel_i0_meta_dispatch.h
special_modified_bessel_i0_native.h
special modified bessel i0 ops.h
special_modified_bessel_i1.h
special_modified_bessel_i1_compositeexplicitautogradnonfunctional_dispatch.h
special_modified_bessel_i1_cpu_dispatch.h
special modified bessel i1 cuda dispatch.h
special_modified_bessel_i1_meta.h
```

special modified bessel i1 meta dispatch.h

```
special_modified_bessel_i1_native.h
special modified bessel i1 ops.h
special_modified_bessel_k0.h
special modified bessel k0 compositeexplicitautogradnonfunctional dispatch.h
special_modified_bessel_k0_cpu_dispatch.h
special modified bessel k0 cuda dispatch.h
special_modified_bessel_k0_meta.h
special modified bessel k0 meta dispatch.h
special modified bessel k0 native.h
special_modified_bessel_k0_ops.h
special modified bessel kl.h
special_modified_bessel_k1_compositeexplicitautogradnonfunctional_dispatch.h
special modified bessel k1 cpu dispatch.h
special_modified_bessel_k1_cuda_dispatch.h
special modified bessel k1 meta.h
special_modified_bessel_k1_meta_dispatch.h
special modified bessel k1 native.h
special_modified_bessel_k1_ops.h
special multigammaln.h
special_multigammaln_compositeimplicitautograd_dispatch.h
special multigammaln native.h
special_multigammaln_ops.h
special ndtr.h
special_ndtri.h
special ndtri compositeexplicitautogradnonfunctional dispatch.h
special ndtri cpu dispatch.h
special_ndtri_cuda_dispatch.h
special ndtri meta.h
special_ndtri_meta_dispatch.h
special ndtri native.h
special_ndtri_ops.h
special ndtr compositeimplicitautograd dispatch.h
special_ndtr_native.h
special ndtr ops.h
special_polygamma.h
special polygamma compositeimplicitautograd dispatch.h
special_polygamma_native.h
special polygamma ops.h
special_psi.h
special psi compositeimplicitautograd dispatch.h
special_psi_native.h
special_psi_ops.h
special_round.h
special_round_compositeimplicitautograd_dispatch.h
special round native.h
special_round_ops.h
special scaled modified bessel k0.h
{\tt special\_scaled\_modified\_bessel\_k0\_composite explicit autograd nonfunctional\_dispatch.} \\ {\tt homeone}
special scaled modified bessel k0 cpu dispatch.h
special_scaled_modified_bessel_k0_cuda_dispatch.h
special scaled modified bessel k0 meta.h
```

```
special_scaled_modified_bessel_k0_meta_dispatch.h
special scaled modified bessel k0 native.h
special_scaled_modified_bessel_k0_ops.h
special scaled modified bessel kl.h
special scaled modified bessel k1 cpu dispatch.h
special_scaled_modified_bessel_k1_cuda_dispatch.h
special scaled modified bessel k1 meta.h
special_scaled_modified_bessel_k1_meta_dispatch.h
special_scaled_modified_bessel_k1_native.h
special scaled modified bessel k1 ops.h
special_shifted_chebyshev_polynomial_t.h
special shifted chebyshev polynomial t compositeexplicitautogradnonfunctional dispatch.h
special_shifted_chebyshev_polynomial_t_compositeexplicitautograd_dispatch.h
special shifted chebyshev polynomial t cpu dispatch.h
special_shifted_chebyshev_polynomial_t_cuda_dispatch.h
special shifted chebyshev polynomial t meta.h
special_shifted_chebyshev_polynomial_t_meta_dispatch.h
special shifted chebyshev polynomial t native.h
special_shifted_chebyshev_polynomial_t_ops.h
special shifted chebyshev polynomial u.h
special_shifted_chebyshev_polynomial_u_compositeexplicitautogradnonfunctional_dispatch.h
special shifted chebyshev polynomial u compositeexplicitautograd dispatch.h
special_shifted_chebyshev_polynomial_u_cpu_dispatch.h
special shifted chebyshev polynomial u cuda dispatch.h
special shifted chebyshev polynomial u meta.h
special shifted chebyshev polynomial u meta dispatch.h
special shifted chebyshev polynomial u native.h
special_shifted_chebyshev_polynomial_u_ops.h
special shifted chebyshev polynomial v.h
special_shifted_chebyshev_polynomial_v_compositeexplicitautogradnonfunctional_dispatch.h
special shifted chebyshev polynomial v compositeexplicitautograd dispatch.h
special_shifted_chebyshev_polynomial_v_cpu_dispatch.h
special shifted chebyshev polynomial v cuda dispatch.h
special_shifted_chebyshev_polynomial_v_meta.h
special shifted chebyshev polynomial v meta dispatch.h
special_shifted_chebyshev_polynomial_v_native.h
special shifted chebyshev polynomial v ops.h
special_shifted_chebyshev_polynomial_w.h
special shifted chebyshev polynomial w compositeexplicitautogradnonfunctional dispatch.h
special_shifted_chebyshev_polynomial_w_compositeexplicitautograd_dispatch.h
special_shifted_chebyshev_polynomial_w_cpu_dispatch.h
special_shifted_chebyshev_polynomial_w_cuda_dispatch.h
special_shifted_chebyshev_polynomial_w_meta.h
special shifted chebyshev polynomial w meta dispatch.h
special_shifted_chebyshev_polynomial_w_native.h
special shifted chebyshev polynomial w ops.h
special sinc.h
special sinc compositeimplicitautograd dispatch.h
special_sinc_native.h
```

special sinc ops.h

```
special_softmax.h
special softmax compositeimplicitautograd dispatch.h
special_softmax_native.h
special softmax ops.h
special_spherical_bessel_j0.h
special spherical bessel j0 compositeexplicitautogradnonfunctional dispatch.h
special_spherical_bessel_j0_cpu_dispatch.h
special spherical bessel j0 cuda dispatch.h
special_spherical_bessel_j0_meta.h
special_spherical_bessel_j0_meta_dispatch.h
special spherical bessel j0 native.h
special_spherical_bessel_j0_ops.h
special xlog1py.h
\verb|special_xlog1py_compositeexplicit autograd nonfunctional_dispatch.h|
special xlog1py compositeexplicitautograd dispatch.h
special_xlog1py_cpu_dispatch.h
special xlog1py cuda dispatch.h
special_xlog1py_meta.h
special xlog1py meta dispatch.h
special_xlog1py_native.h
special xlog1py ops.h
special_xlogy.h
special xlogy compositeimplicitautograd dispatch.h
special_xlogy_native.h
special xlogy ops.h
special_zeta.h
\verb|special_zeta_composite explicit autograd nonfunctional_dispatch.h|
special zeta compositeexplicitautograd dispatch.h
special_zeta_cpu_dispatch.h
special zeta cuda dispatch.h
special_zeta_meta.h
special zeta meta dispatch.h
special_zeta_native.h
special zeta ops.h
split.h
split compositeexplicitautograd dispatch.h
split_compositeimplicitautograd_dispatch.h
split copy.h
\verb|split_copy_composite explicit autograd nonfunctional_dispatch.h|
split copy compositeexplicitautograd dispatch.h
split_copy_native.h
split_copy_ops.h
split_native.h
split_ops.h
split with sizes.h
split_with_sizes_compositeexplicitautograd_dispatch.h
split_with_sizes_copy.h
split_with_sizes_copy_compositeexplicitautogradnonfunctional_dispatch.h
split with sizes copy compositeexplicitautograd dispatch.h
split_with_sizes_copy_cuda_dispatch.h
split with sizes copy native.h
```

```
split_with_sizes_copy_ops.h
split with sizes native.h
split_with_sizes_ops.h
sqrt.h
sqrt_compositeexplicitautogradnonfunctional_dispatch.h
sqrt cpu dispatch.h
sqrt_cuda_dispatch.h
sqrt meta.h
sqrt_meta_dispatch.h
sqrt_native.h
sqrt ops.h
square.h
square compositeimplicitautograd dispatch.h
square_native.h
square ops.h
squeeze.h
squeeze compositeexplicitautograd dispatch.h
squeeze_compositeimplicitautograd_dispatch.h
squeeze copy.h
squeeze_copy_compositeexplicitautogradnonfunctional_dispatch.h
squeeze copy compositeexplicitautograd dispatch.h
squeeze_copy_native.h
squeeze copy ops.h
squeeze_native.h
squeeze ops.h
sspaddmm.h
sspaddmm_compositeimplicitautograd_dispatch.h
sspaddmm cpu dispatch.h
sspaddmm_cuda_dispatch.h
sspaddmm native.h
sspaddmm_ops.h
stack_compositeexplicitautograd_dispatch.h
stack native.h
stack ops.h
std.h
std_compositeimplicitautograd_dispatch.h
std cpu dispatch.h
std_cuda_dispatch.h
std mean.h
std_mean_compositeexplicitautograd_dispatch.h
std_mean_compositeimplicitautograd_dispatch.h
std_mean_cpu_dispatch.h
std_mean_cuda_dispatch.h
std mean native.h
std_mean_ops.h
std native.h
std_ops.h
stft.h
stft_compositeimplicitautograd_dispatch.h
stft native.h
```

```
stft_ops.h
stride.h
stride_compositeimplicitautograd_dispatch.h
stride native.h
stride_ops.h
sub.h
subtract.h
subtract compositeimplicitautograd dispatch.h
subtract native.h
subtract_ops.h
sub compositeexplicitautogradnonfunctional dispatch.h
\verb"sub_composite explicit autograd_dispatch.h"
sub_cpu_dispatch.h
sub_cuda_dispatch.h
sub meta.h
sub_meta_dispatch.h
sub native.h
sub_ops.h
sum.h
sum_compositeexplicitautogradnonfunctional_dispatch.h
sum compositeexplicitautograd dispatch.h
\verb|sum_composite implicit autograd_dispatch.h|
sum cpu dispatch.h
sum_cuda_dispatch.h
sum meta.h
sum meta dispatch.h
sum_native.h
sum ops.h
sum_to_size.h
sum to size compositeimplicitautograd dispatch.h
sum_to_size_native.h
sum to size ops.h
svd.h
svd compositeimplicitautograd dispatch.h
svd native.h
svd ops.h
swapaxes.h
swapaxes compositeimplicitautograd dispatch.h
swapaxes_native.h
swapaxes ops.h
swapdims.h
swapdims_compositeimplicitautograd_dispatch.h
swapdims_native.h
swapdims_ops.h
sym constrain range.h
{\tt sym\_constrain\_range\_composite explicit autograd\_dispatch.h}
sym_constrain_range_for_size.h
\verb|sym_constrain_range_for_size_composite explicit autograd_dispatch.h|
sym_constrain_range_for_size_native.h
sym_constrain_range_for_size_ops.h
sym constrain range native.h
```

```
sym_constrain_range_ops.h
sym numel.h
sym_numel_compositeimplicitautograd_dispatch.h
sym numel native.h
sym_numel_ops.h
sym size.h
{\tt sym\_size\_compositeimplicitautograd\_dispatch.h}
sym size native.h
sym_size_ops.h
sym_storage_offset.h
\verb|sym_storage_offset_composite implicit autograd_dispatch.h|
sym_storage_offset_native.h
sym storage offset ops.h
sym_stride.h
sym stride compositeimplicitautograd dispatch.h
sym_stride_native.h
sym stride ops.h
t.h
take.h
take_along_dim.h
take along dim compositeimplicitautograd dispatch.h
take_along_dim_native.h
take along dim ops.h
take_cpu_dispatch.h
take cuda dispatch.h
take_native.h
take_ops.h
tan.h
tanh.h
tanh backward.h
\verb|tanh_backward_composite explicit autograd nonfunctional_dispatch.h|
tanh_backward_cpu_dispatch.h
tanh_backward_cuda_dispatch.h
tanh backward meta.h
tanh_backward_meta_dispatch.h
tanh backward native.h
tanh_backward_ops.h
tanh compositeexplicitautogradnonfunctional dispatch.h
tanh_cpu_dispatch.h
tanh cuda dispatch.h
tanh_meta.h
tanh_meta_dispatch.h
tanh_native.h
tanh ops.h
tan compositeexplicitautogradnonfunctional dispatch.h
tan_cpu_dispatch.h
tan cuda dispatch.h
tan_meta.h
tan meta dispatch.h
tan_native.h
tan ops.h
```

```
tensor.h
tensordot.h
{\tt tensordot\_compositeimplicitautograd\_dispatch.h}
tensordot native.h
tensordot_ops.h
tensor split.h
tensor_split_compositeimplicitautograd_dispatch.h
tensor split native.h
tensor_split_ops.h
thnn conv2d.h
thnn conv2d compositeimplicitautograd dispatch.h
thnn_conv2d_native.h
thnn conv2d ops.h
threshold.h
threshold backward.h
threshold_backward_compositeexplicitautogradnonfunctional_dispatch.h
threshold_backward_cpu_dispatch.h
threshold_backward_cuda_dispatch.h
threshold backward meta.h
threshold_backward_meta_dispatch.h
threshold backward native.h
threshold_backward_ops.h
threshold composite explicit autogradnon functional dispatch.h
threshold_cpu_dispatch.h
threshold cuda dispatch.h
threshold_meta.h
threshold_meta_dispatch.h
threshold native.h
threshold_ops.h
tile.h
\verb|tile_compositeimplicitautograd_dispatch.h|
tile native.h
tile_ops.h
to.h
topk.h
topk compositeexplicitautogradnonfunctional dispatch.h
topk_cpu_dispatch.h
topk cuda dispatch.h
topk_meta.h
topk meta dispatch.h
topk_native.h
topk_ops.h
to_compositeimplicitautograd_dispatch.h
to_dense.h
to dense backward.h
\verb"to_dense_backward_composite implicit autograd_dispatch.h"
to_dense_backward_native.h
to_dense_backward_ops.h
to dense compositeimplicitautograd dispatch.h
to_dense_native.h
to dense ops.h
```

```
to_mkldnn.h
            to mkldnn backward.h
            to_mkldnn_backward_compositeimplicitautograd_dispatch.h
            to mkldnn backward native.h
            to_mkldnn_backward_ops.h
            to mkldnn compositeexplicitautograd dispatch.h
            to_mkldnn_cpu_dispatch.h
            to_mkldnn_native.h
            to mkldnn ops.h
            to_native.h
            to ops.h
            to_padded_tensor.h
            to padded tensor compositeexplicitautograd dispatch.h
            to_padded_tensor_native.h
            to padded tensor ops.h
            to_sparse.h
            to sparse bsc.h
            to_sparse_bsc_compositeimplicitautograd_dispatch.h
            to sparse bsc native.h
            to_sparse_bsc_ops.h
            to sparse bsr.h
            \verb|to_sparse_bsr_composite implicit autograd_dispatch.h|
            to sparse bsr native.h
            to_sparse_bsr_ops.h
            to_sparse_compositeimplicitautograd_dispatch.h
            to sparse csc.h
            to_sparse_csc_compositeimplicitautograd_dispatch.h
            to sparse csc native.h
            to_sparse_csc_ops.h
            to sparse csr.h
            \verb"to_sparse_csr_composite implicit autograd_dispatch.h"
            to sparse csr native.h
            to_sparse_csr_ops.h
            to sparse native.h
            to_sparse_ops.h
            trace.h
            trace_backward.h
            trace backward compositeimplicitautograd dispatch.h
            trace_backward_native.h
            trace backward ops.h
            trace_compositeexplicitautograd_dispatch.h
            trace_cpu_dispatch.h
            trace cuda dispatch.h
            trace_native.h
            trace ops.h
            transpose.h
            transpose compositeexplicitautograd dispatch.h
            transpose_compositeimplicitautograd_dispatch.h
1
            transpose copy.h
            transpose_copy_compositeexplicitautogradnonfunctional_dispatch.h
            transpose copy compositeexplicitautograd dispatch.h
```

```
transpose_copy_native.h
transpose_copy_ops.h
transpose_native.h
transpose ops.h
trapezoid.h
trapezoid compositeimplicitautograd dispatch.h
trapezoid_native.h
trapezoid_ops.h
trapz.h
trapz_compositeimplicitautograd_dispatch.h
trapz native.h
trapz_ops.h
triangular solve.h
\verb|triangular_solve_composite explicit autograd nonfunctional_dispatch.h|
triangular solve cpu dispatch.h
triangular_solve_cuda_dispatch.h
triangular solve meta.h
triangular_solve_meta_dispatch.h
triangular solve native.h
triangular_solve_ops.h
tril.h
\verb|tril_composite explicit autograd nonfunctional_dispatch.h|
tril cpu dispatch.h
tril_cuda_dispatch.h
tril indices.h
tril indices compositeexplicitautograd dispatch.h
tril_indices_cpu_dispatch.h
tril indices cuda dispatch.h
tril_indices_native.h
tril indices ops.h
tril_meta.h
tril meta dispatch.h
tril_native.h
tril ops.h
triplet_margin_loss.h
triplet_margin_loss_compositeimplicitautograd_dispatch.h
triplet_margin_loss_native.h
triplet margin loss ops.h
triu.h
triu compositeexplicitautogradnonfunctional dispatch.h
triu_cpu_dispatch.h
triu_cuda_dispatch.h
triu indices.h
\verb|triu_indices_compositeexplicitautograd_dispatch.h|
triu indices cpu dispatch.h
triu_indices_cuda_dispatch.h
triu indices native.h
triu_indices_ops.h
triu meta.h
triu_meta_dispatch.h
triu native.h
```

```
triu_ops.h
true divide.h
true_divide_compositeimplicitautograd_dispatch.h
true divide native.h
true_divide_ops.h
trunc.h
\verb|trunc_composite explicit autograd non functional_dispatch.h|
trunc cpu dispatch.h
trunc cuda dispatch.h
trunc_meta.h
trunc_meta_dispatch.h
trunc_native.h
trunc ops.h
type_as.h
type as compositeimplicitautograd dispatch.h
type_as_native.h
type_as_ops.h
t_compositeexplicitautograd_dispatch.h
t_copy_compositeexplicitautogradnonfunctional_dispatch.h
t copy compositeexplicitautograd dispatch.h
t_copy_native.h
t copy ops.h
t_native.h
t ops.h
unbind.h
\verb"unbind_composite explicit autograd_dispatch.h"
unbind compositeimplicitautograd dispatch.h
unbind_copy.h
unbind copy compositeexplicitautogradnonfunctional dispatch.h
unbind_copy_compositeexplicitautograd_dispatch.h
unbind copy native.h
unbind_copy_ops.h
unbind native.h
unbind_ops.h
unflatten.h
unflatten\_compositeimplicitautograd\_dispatch.h
unflatten dense tensors.h
unflatten\_dense\_tensors\_compositeimplicitautograd\_dispatch.h
unflatten dense tensors native.h
unflatten_dense_tensors_ops.h
unflatten_native.h
unflatten ops.h
unfold.h
unfold backward.h
\verb"unfold_backward_composite explicit autograd_dispatch.h"
unfold_backward_cpu_dispatch.h
unfold_backward_cuda_dispatch.h
unfold backward native.h
unfold_backward_ops.h
unfold copy.h
```

```
\verb"unfold_copy_composite explicit autograd nonfunctional_dispatch.h"
unfold copy compositeexplicitautograd dispatch.h
unfold_copy_native.h
unfold copy ops.h
unfold_cpu_dispatch.h
unfold cuda dispatch.h
unfold_meta_dispatch.h
unfold native.h
unfold ops.h
uniform.h
uniform compositeexplicitautograd dispatch.h
uniform_cpu_dispatch.h
uniform cuda dispatch.h
uniform_meta_dispatch.h
uniform native.h
uniform_ops.h
unique consecutive.h
unique_consecutive_compositeexplicitautograd_dispatch.h
unique consecutive cpu dispatch.h
unique_consecutive_cuda_dispatch.h
unique consecutive native.h
unique_consecutive_ops.h
unique dim.h
unique_dim_compositeexplicitautograd_dispatch.h
unique dim consecutive.h
unique dim consecutive compositeexplicitautograd dispatch.h
unique_dim_consecutive_cpu_dispatch.h
unique dim consecutive cuda dispatch.h
unique_dim_consecutive_native.h
unique dim consecutive ops.h
unique_dim_cpu_dispatch.h
unique dim cuda dispatch.h
unique_dim_native.h
unique dim ops.h
unsafe_chunk.h
unsafe chunk compositeimplicitautograd dispatch.h
unsafe_chunk_native.h
unsafe chunk ops.h
unsafe_split.h
unsafe split compositeexplicitautograd dispatch.h
unsafe_split_native.h
unsafe_split_ops.h
unsafe_split_with_sizes.h
\verb"unsafe_split_with_sizes_composite explicit autograd_dispatch.h"
unsafe split with sizes native.h
unsafe_split_with_sizes_ops.h
unsqueeze.h
unsqueeze_compositeexplicitautograd_dispatch.h
unsqueeze copy.h
unsqueeze\_copy\_composite explicit autograd non functional\_dispatch.h
unsqueeze copy compositeexplicitautograd dispatch.h
```

```
unsqueeze_copy_native.h
unsqueeze copy ops.h
unsqueeze_native.h
unsqueeze ops.h
upsample_bicubic2d.h
upsample bicubic2d backward.h
upsample_bicubic2d_backward_compositeexplicitautogradnonfunctional_dispatch.h
upsample_bicubic2d_backward_cpu_dispatch.h
upsample bicubic2d backward cuda dispatch.h
upsample_bicubic2d_backward_meta.h
upsample bicubic2d backward meta dispatch.h
upsample_bicubic2d_backward_native.h
upsample bicubic2d backward ops.h
\verb"upsample_bicubic2d_composite explicit autograd nonfunctional_dispatch.h"
upsample bicubic2d compositeimplicitautograd dispatch.h
upsample_bicubic2d_cpu_dispatch.h
upsample bicubic2d cuda dispatch.h
upsample_bicubic2d_meta.h
upsample bicubic2d meta dispatch.h
upsample_bicubic2d_native.h
upsample bicubic2d ops.h
upsample_bilinear2d.h
upsample bilinear2d backward.h
upsample_bilinear2d_backward_compositeexplicitautogradnonfunctional_dispatch.h
upsample bilinear2d backward cpu dispatch.h
upsample bilinear2d backward cuda dispatch.h
upsample_bilinear2d_backward_meta.h
upsample bilinear2d backward meta dispatch.h
upsample_bilinear2d_backward_native.h
upsample bilinear2d backward ops.h
upsample_bilinear2d_compositeexplicitautogradnonfunctional_dispatch.h
upsample bilinear2d compositeexplicitautograd dispatch.h
upsample_bilinear2d_compositeimplicitautograd_dispatch.h
upsample bilinear2d cpu dispatch.h
upsample_bilinear2d_cuda_dispatch.h
upsample bilinear2d meta.h
upsample_bilinear2d_meta_dispatch.h
upsample bilinear2d native.h
upsample_bilinear2d_ops.h
upsample linearld.h
upsample_linear1d_backward.h
\verb"upsample_linearld_backward_composite explicit autograd nonfunctional_dispatch.h"
upsample linearld backward cpu dispatch.h
upsample_linear1d_backward_cuda_dispatch.h
upsample linearld backward meta.h
upsample_linear1d_backward_meta_dispatch.h
upsample linearld backward native.h
upsample_linear1d_backward_ops.h
upsample linearld compositeexplicitautogradnonfunctional dispatch.h
upsample_linear1d_compositeimplicitautograd_dispatch.h
upsample linearld cpu dispatch.h
```

```
upsample_linearld_cuda_dispatch.h
upsample linearld meta.h
upsample_linearld_meta_dispatch.h
upsample linearld native.h
upsample_linear1d_ops.h
upsample nearest1d.h
upsample_nearest1d_backward.h
upsample nearestld backward compositeexplicitautogradnonfunctional dispatch.h
upsample nearestld backward cpu dispatch.h
upsample_nearestld_backward_cuda_dispatch.h
upsample nearestld backward meta.h
upsample_nearestld_backward_meta_dispatch.h
upsample nearestld backward native.h
upsample_nearest1d_backward_ops.h
upsample nearest1d compositeexplicitautogradnonfunctional dispatch.h
upsample\_nearestld\_compositeimplicitautograd\_dispatch.h
upsample nearestld cpu dispatch.h
upsample_nearest1d_cuda_dispatch.h
upsample nearestld meta.h
upsample_nearest1d_meta_dispatch.h
upsample nearestld native.h
upsample_nearest1d_ops.h
upsample nearest2d.h
upsample_nearest2d_backward.h
upsample nearest2d backward compositeexplicitautogradnonfunctional dispatch.h
upsample nearest2d backward cpu dispatch.h
upsample_nearest2d_backward_cuda_dispatch.h
upsample nearest2d backward meta.h
upsample_nearest2d_backward_meta_dispatch.h
upsample nearest2d backward native.h
upsample_nearest2d_backward_ops.h
upsample nearest2d compositeexplicitautogradnonfunctional dispatch.h
upsample_nearest2d_compositeexplicitautograd_dispatch.h
upsample nearest2d compositeimplicitautograd dispatch.h
upsample_nearest2d_cpu_dispatch.h
upsample nearest2d cuda dispatch.h
upsample_nearest2d_meta.h
upsample nearest2d meta dispatch.h
upsample_nearest2d_native.h
upsample nearest2d ops.h
upsample_nearest3d.h
upsample nearest3d backward.h
upsample_nearest3d_backward_compositeexplicitautogradnonfunctional_dispatch.h
upsample_nearest3d_backward_cpu_dispatch.h
upsample nearest3d backward cuda dispatch.h
upsample_nearest3d_backward_meta.h
upsample nearest3d backward meta dispatch.h
upsample_nearest3d_backward_native.h
upsample nearest3d backward ops.h
\verb"upsample_nearest3d_composite explicit autograd nonfunctional_dispatch.h"
upsample nearest3d compositeimplicitautograd dispatch.h
```

```
upsample_nearest3d_cpu_dispatch.h
upsample nearest3d cuda dispatch.h
upsample_nearest3d_meta.h
upsample nearest3d meta dispatch.h
upsample_nearest3d_native.h
upsample nearest3d ops.h
upsample_trilinear3d.h
upsample trilinear3d backward.h
upsample_trilinear3d_backward_compositeexplicitautogradnonfunctional_dispatch.h
upsample_trilinear3d_backward_cpu_dispatch.h
upsample trilinear3d backward cuda dispatch.h
upsample_trilinear3d_backward_meta.h
upsample trilinear3d backward meta dispatch.h
upsample_trilinear3d_backward_native.h
upsample trilinear3d backward ops.h
upsample_trilinear3d_compositeexplicitautogradnonfunctional_dispatch.h
upsample trilinear3d compositeimplicitautograd dispatch.h
upsample_trilinear3d_cpu_dispatch.h
upsample trilinear3d cuda dispatch.h
upsample_trilinear3d_meta.h
upsample trilinear3d meta dispatch.h
upsample_trilinear3d_native.h
upsample trilinear3d ops.h
values.h
values compositeexplicitautograd dispatch.h
values copy.h
\verb|values_copy_composite explicit autograd nonfunctional_dispatch.h|
values copy compositeexplicitautograd dispatch.h
values_copy_native.h
values copy ops.h
values_native.h
values ops.h
value_selecting_reduction_backward.h
value selecting reduction backward compositeimplicitautograd dispatch.h
value_selecting_reduction_backward_native.h
value selecting reduction backward ops.h
vander.h
vander compositeimplicitautograd dispatch.h
vander_native.h
vander ops.h
var.h
var_compositeimplicitautograd_dispatch.h
var_cpu_dispatch.h
var_cuda_dispatch.h
var mean.h
var_mean_compositeexplicitautograd_dispatch.h
var mean compositeimplicitautograd dispatch.h
var_mean_cpu_dispatch.h
var mean cuda dispatch.h
var_mean_native.h
var mean ops.h
```

```
var_native.h
var ops.h
vdot.h
vdot compositeexplicitautograd dispatch.h
vdot_cpu_dispatch.h
vdot cuda dispatch.h
vdot_native.h
vdot ops.h
view.h
view_as.h
view as complex.h
view_as_complex_copy.h
view as complex copy compositeexplicitautogradnonfunctional dispatch.h
\verb"view_as_complex_copy_composite explicit autograd_dispatch.h
view as complex copy native.h
view_as_complex_copy_ops.h
view_as_complex_cpu_dispatch.h
view_as_complex_cuda_dispatch.h
view as complex meta dispatch.h
view_as_complex_native.h
view as complex ops.h
view_as_compositeimplicitautograd_dispatch.h
view as native.h
view_as_ops.h
view as real.h
view as real copy.h
\verb|view_as_real_copy_composite explicit autograd nonfunctional_dispatch.h|
view as real copy compositeexplicitautograd dispatch.h
view_as_real_copy_native.h
view as real copy ops.h
view_as_real_cpu_dispatch.h
view_as_real_cuda_dispatch.h
view_as_real_meta_dispatch.h
view as real native.h
view_as_real_ops.h
view compositeexplicitautograd dispatch.h
view_copy.h
view copy compositeexplicitautogradnonfunctional dispatch.h
\verb"view_copy_composite explicit autograd_dispatch.h"
view copy native.h
view_copy_ops.h
view_cpu_dispatch.h
view_cuda_dispatch.h
view_meta_dispatch.h
view native.h
view_ops.h
vsplit_compositeimplicitautograd_dispatch.h
vsplit native.h
vsplit_ops.h
vstack.h
```

```
vstack_compositeimplicitautograd_dispatch.h
vstack native.h
vstack_ops.h
where.h
where_compositeimplicitautograd_dispatch.h
where cpu dispatch.h
where_cuda_dispatch.h
where_native.h
where ops.h
xlogy.h
xlogy compositeexplicitautogradnonfunctional dispatch.h
xlogy_compositeexplicitautograd_dispatch.h
xlogy cpu dispatch.h
xlogy_cuda_dispatch.h
xlogy_meta.h
xlogy_meta_dispatch.h
xlogy native.h
xlogy_ops.h
xor_compositeimplicitautograd_dispatch.h
xor native.h
xor_ops.h
zero.h
zeros.h
zeros_compositeexplicitautograd_dispatch.h
zeros like.h
{\tt zeros\_like\_composite explicit autograd\_dispatch.h}
zeros like compositeimplicitautogradnestedtensor dispatch.h
zeros_like_native.h
zeros like ops.h
zeros_native.h
zeros ops.h
zero_compositeexplicitautograd_dispatch.h
zero cpu dispatch.h
zero_cuda_dispatch.h
zero meta dispatch.h
zero_native.h
zero ops.h
_adaptive_avg_pool2d.h
adaptive avg pool2d backward.h
\verb|_adaptive_avg_pool2d_backward_composite explicit autograd_dispatch.h|
_adaptive_avg_pool2d_backward_cpu_dispatch.h
_adaptive_avg_pool2d_backward_cuda_dispatch.h
_adaptive_avg_pool2d_backward_native.h
adaptive avg pool2d backward ops.h
\verb|_adaptive_avg_pool2d_composite explicit autograd_dispatch.h|
_adaptive_avg_pool2d_cpu_dispatch.h
_adaptive_avg_pool2d_cuda_dispatch.h
adaptive avg pool2d native.h
_adaptive_avg_pool2d_ops.h
adaptive avg pool3d.h
```

```
_adaptive_avg_pool3d_backward.h
adaptive avg pool3d backward compositeexplicitautograd dispatch.h
_adaptive_avg_pool3d_backward_cpu_dispatch.h
adaptive avg pool3d backward cuda dispatch.h
_adaptive_avg_pool3d_backward_native.h
adaptive avg pool3d backward ops.h
_adaptive_avg_pool3d_compositeexplicitautograd_dispatch.h
adaptive avg pool3d cpu dispatch.h
_adaptive_avg_pool3d_cuda_dispatch.h
_adaptive_avg_pool3d_native.h
adaptive avg pool3d ops.h
_addmm_activation.h
_addmm_activation_compositeexplicitautogradnonfunctional_dispatch.h
_addmm_activation_cpu_dispatch.h
addmm activation cuda dispatch.h
_addmm_activation_meta.h
_addmm_activation_meta_dispatch.h
_addmm_activation_native.h
addmm activation ops.h
_add_batch_dim.h
add batch dim compositeimplicitautograd dispatch.h
_add_batch_dim_native.h
add batch dim ops.h
_add_relu.h
add relu compositeexplicitautograd dispatch.h
add relu cpu dispatch.h
_add_relu_meta_dispatch.h
add relu native.h
_add_relu_ops.h
aminmax.h
_aminmax_compositeexplicitautograd_dispatch.h
_aminmax_cpu_dispatch.h
_aminmax_cuda_dispatch.h
aminmax native.h
_aminmax_ops.h
amp foreach non finite check and unscale.h
\verb|_amp_foreach_non_finite_check_and_unscale_composite explicit autograd_dispatch.h|
amp foreach non finite check and unscale cpu dispatch.h
_amp_foreach_non_finite_check_and_unscale_cuda_dispatch.h
amp foreach non finite check and unscale native.h
_amp_foreach_non_finite_check_and_unscale_ops.h
_amp_update_scale.h
_amp_update_scale_compositeexplicitautograd_dispatch.h
_amp_update_scale_cpu_dispatch.h
amp update scale cuda dispatch.h
_amp_update_scale_meta_dispatch.h
_amp_update_scale_native.h
_amp_update_scale_ops.h
assert async.h
_assert_async_cpu_dispatch.h
assert async cuda dispatch.h
```

```
_assert_async_native.h
                    assert async ops.h
                   _assert_scalar.h
                    assert scalar compositeexplicitautograd dispatch.h
                    _assert_scalar_native.h
                    assert scalar ops.h
                    _assert_tensor_metadata.h
                    assert tensor metadata compositeexplicitautograd dispatch.h
                    _assert_tensor_metadata_meta_dispatch.h
                    _assert_tensor_metadata_native.h
                    assert tensor metadata ops.h
                    _autocast_to_full_precision.h
                    autocast to full precision composite implicit autograd dispatch.h
                    _autocast_to_full_precision_native.h
                    autocast to full precision ops.h
                    _autocast_to_reduced_precision.h
                    _autocast_to_reduced_precision_compositeimplicitautograd_dispatch.h
                    _autocast_to_reduced_precision_native.h
                    autocast to reduced precision ops.h
                    backward.h
                    backward compositeimplicitautograd dispatch.h
                    _backward_native.h
                    backward ops.h
                    _batch_norm_impl_index.h
                    batch norm impl index backward.h
                    _batch_norm_impl_index_backward_compositeimplicitautograd_dispatch.h
                    _batch_norm_impl_index_backward_native.h
                    batch norm impl index backward ops.h
                    _batch_norm_impl_index_compositeimplicitautograd_dispatch.h
                    batch norm impl index native.h
                    _batch_norm_impl_index_ops.h
                    batch norm no update.h
                    _batch_norm_no_update_compositeexplicitautograd_dispatch.h
                    batch norm no update native.h
                    _batch_norm_no_update_ops.h
                    batch norm with update.h
                    \verb|_batch_norm_with_update_composite explicit autograd_dispatch.h|
                    batch norm with update cpu dispatch.h
                    _batch_norm_with_update_cuda_dispatch.h
                    batch norm with update native.h
                    _batch_norm_with_update_ops.h
                    cast Byte.h
                    _cast_Byte_compositeimplicitautograd_dispatch.h
                   _cast_Byte_native.h
                    cast Byte ops.h
                   _cast_Char.h
                   _cast_Char_compositeimplicitautograd_dispatch.h
                   _cast_Char_native.h
                    cast Char ops.h
                    _cast_Double.h
cast Double compositeimplicitautograd dispatch.h
```

```
_cast_Double_native.h
cast Double ops.h
_cast_Float.h
cast Float compositeimplicitautograd dispatch.h
_cast_Float_native.h
cast Float ops.h
_cast_Half.h
cast Half compositeimplicitautograd dispatch.h
cast Half native.h
_cast_Half_ops.h
cast Int.h
\verb|_cast_Int_composite implicit autograd_dispatch.h|
cast Int native.h
_cast_Int_ops.h
cast Long.h
_cast_Long_compositeimplicitautograd_dispatch.h
_cast_Long_native.h
_cast_Long_ops.h
cast Short.h
_cast_Short_compositeimplicitautograd_dispatch.h
cast Short native.h
_cast_Short_ops.h
cdist backward.h
\verb|_cdist_backward_composite explicit autograd_dispatch.h|
cdist backward cpu dispatch.h
cdist backward cuda dispatch.h
_cdist_backward_native.h
cdist backward ops.h
_cdist_forward.h
cdist forward compositeexplicitautograd dispatch.h
_cdist_forward_cpu_dispatch.h
_cdist_forward_cuda_dispatch.h
_cdist_forward_native.h
cdist forward ops.h
_cholesky_solve_helper.h
_cholesky_solve_helper_compositeexplicitautograd_dispatch.h
_cholesky_solve_helper_cpu_dispatch.h
cholesky solve helper cuda dispatch.h
_cholesky_solve_helper_native.h
cholesky solve helper ops.h
_choose_qparams_per_tensor.h
_choose_qparams_per_tensor_compositeimplicitautograd_dispatch.h
_choose_qparams_per_tensor_native.h
_choose_qparams_per_tensor_ops.h
chunk cat.h
_chunk_cat_compositeexplicitautograd_dispatch.h
_chunk_cat_cuda_dispatch.h
_chunk_cat_native.h
chunk cat ops.h
coalesce.h
coalesced.h
```

```
_coalesced_compositeexplicitautograd_dispatch.h
coalesced meta dispatch.h
_coalesced_native.h
coalesced ops.h
_coalesce_compositeexplicitautograd_dispatch.h
coalesce native.h
_coalesce_ops.h
compute linear combination.h
_compute_linear_combination_cpu_dispatch.h
_compute_linear_combination_cuda_dispatch.h
compute linear combination native.h
_compute_linear_combination_ops.h
conj.h
_conj_compositeexplicitautograd_dispatch.h
conj copy.h
_conj_copy_compositeexplicitautogradnonfunctional_dispatch.h
conj copy compositeexplicitautograd dispatch.h
_conj_copy_native.h
conj copy ops.h
_conj_native.h
conj ops.h
_conj_physical.h
conj physical compositeexplicitautograd dispatch.h
_conj_physical_native.h
conj physical ops.h
convert indices from coo to csr.h
\verb|_convert_indices_from_coo_to_csr_composite explicit autograd nonfunctional_dispatch.h|
convert indices from coo to csr cpu dispatch.h
_convert_indices_from_coo_to_csr_cuda_dispatch.h
convert indices_from_coo_to_csr_meta.h
_convert_indices_from_coo_to_csr_meta_dispatch.h
convert indices from coo to csr native.h
_convert_indices_from_coo_to_csr_ops.h
convert indices from csr to coo.h
_convert_indices_from_csr_to_coo_compositeexplicitautogradnonfunctional_dispatch.h
convert indices from csr to coo cpu dispatch.h
_convert_indices_from_csr_to_coo_cuda_dispatch.h
convert indices from csr to coo meta.h
_convert_indices_from_csr_to_coo_meta_dispatch.h
convert indices from csr to coo native.h
_convert_indices_from_csr_to_coo_ops.h
_convert_weight_to_int4pack.h
_convert_weight_to_int4pack_cuda_dispatch.h
_convert_weight_to_int4pack_for_cpu.h
convert weight to int4pack for cpu cpu dispatch.h
_convert_weight_to_int4pack_for_cpu_native.h
_convert_weight_to_int4pack_for_cpu_ops.h
_convert_weight_to_int4pack_native.h
convert weight to int4pack ops.h
convolution.h
convolution compositeexplicitautograd dispatch.h
```

```
_convolution_compositeimplicitautograd_dispatch.h
convolution double backward.h
_convolution_double_backward_compositeimplicitautograd_dispatch.h
convolution double backward native.h
_convolution_double_backward_ops.h
convolution mode.h
\verb|_convolution_mode_composite implicit autograd_dispatch.h|
convolution mode native.h
_convolution_mode_ops.h
_convolution_native.h
convolution ops.h
_conv_depthwise2d.h
conv depthwise2d cuda dispatch.h
_conv_depthwise2d_native.h
conv depthwise2d ops.h
_copy_from.h
_copy_from_and_resize.h
_copy_from_and_resize_compositeexplicitautograd_dispatch.h
copy from and resize native.h
_copy_from_and_resize_ops.h
copy from compositeexplicitautograd dispatch.h
_copy_from_native.h
copy from ops.h
_cslt_compress.h
cslt compress cuda dispatch.h
_cslt_compress_native.h
_cslt_compress_ops.h
cslt sparse mm.h
_cslt_sparse_mm_cuda_dispatch.h
cslt sparse mm native.h
_cslt_sparse_mm_ops.h
_cslt_sparse_mm_search.h
_cslt_sparse_mm_search_cuda_dispatch.h
cslt sparse mm search native.h
_cslt_sparse_mm_search_ops.h
ctc loss.h
_ctc_loss_backward.h
ctc loss backward compositeexplicitautograd dispatch.h
_ctc_loss_backward_cpu_dispatch.h
ctc loss backward cuda dispatch.h
_ctc_loss_backward_native.h
_ctc_loss_backward_ops.h
_ctc_loss_compositeexplicitautograd_dispatch.h
_ctc_loss_cpu_dispatch.h
ctc loss cuda dispatch.h
_ctc_loss_meta_dispatch.h
_ctc_loss_native.h
_ctc_loss_ops.h
cudnn ctc loss.h
_cudnn_ctc_loss_compositeexplicitautograd_dispatch.h
cudnn ctc loss cuda dispatch.h
```

```
_cudnn_ctc_loss_native.h
cudnn ctc loss ops.h
_cudnn_init_dropout_state.h
cudnn init dropout state compositeexplicitautograd dispatch.h
_cudnn_init_dropout_state_cuda_dispatch.h
cudnn init dropout state native.h
_cudnn_init_dropout_state_ops.h
cudnn rnn.h
_cudnn_rnn_backward.h
_cudnn_rnn_backward_compositeexplicitautograd_dispatch.h
cudnn rnn backward cuda dispatch.h
_cudnn_rnn_backward_native.h
cudnn rnn backward ops.h
_cudnn_rnn_compositeexplicitautograd_dispatch.h
cudnn rnn cuda dispatch.h
_cudnn_rnn_flatten_weight.h
cudnn rnn flatten weight compositeexplicitautograd dispatch.h
_cudnn_rnn_flatten_weight_cuda_dispatch.h
cudnn rnn flatten weight native.h
_cudnn_rnn_flatten_weight_ops.h
cudnn rnn native.h
_cudnn_rnn_ops.h
cufft clear plan cache.h
\verb|_cufft_clear_plan_cache_composite implicit autograd_dispatch.h|
cufft clear plan cache native.h
_cufft_clear_plan_cache_ops.h
_cufft_get_plan_cache_max_size.h
cufft get plan cache max size compositeimplicitautograd dispatch.h
_cufft_get_plan_cache_max_size_native.h
cufft get plan cache max size ops.h
_cufft_get_plan_cache_size.h
cufft get plan cache size compositeimplicitautograd dispatch.h
_cufft_get_plan_cache_size_native.h
cufft get plan cache size ops.h
_cufft_set_plan_cache_max_size.h
cufft set plan cache max size compositeimplicitautograd dispatch.h
_cufft_set_plan_cache_max_size_native.h
cufft set plan cache max size ops.h
_cummax_helper.h
cummax helper cpu dispatch.h
_cummax_helper_cuda_dispatch.h
_cummax_helper_native.h
_cummax_helper_ops.h
cummin helper.h
cummin helper cpu dispatch.h
_cummin_helper_cuda_dispatch.h
cummin helper native.h
_cummin_helper_ops.h
debug has internal overlap.h
_debug_has_internal_overlap_compositeimplicitautograd_dispatch.h
debug has internal overlap native.h
```

```
_debug_has_internal_overlap_ops.h
dimI.h
_dimI_native.h
dimI ops.h
_dimV.h
dimV native.h
_dimV_ops.h
dim arange.h
\_\mathtt{dim}\_\mathtt{arange}\_\mathtt{compositeimplicitautograd}\_\mathtt{dispatch.h}
_dim_arange_native.h
dim arange ops.h
_dirichlet_grad.h
_dirichlet_grad_compositeexplicitautograd dispatch.h
_dirichlet_grad_cpu_dispatch.h
dirichlet grad cuda dispatch.h
_dirichlet_grad_native.h
dirichlet grad ops.h
_efficientzerotensor.h
efficientzerotensor compositeexplicitautograd dispatch.h
_efficientzerotensor_cpu_dispatch.h
efficientzerotensor cuda dispatch.h
_efficientzerotensor_meta_dispatch.h
efficientzerotensor native.h
efficientzerotensor_ops.h
efficient attention backward.h
_efficient_attention_backward_cuda_dispatch.h
efficient attention backward native.h
efficient attention backward ops.h
_efficient_attention_forward.h
efficient attention forward cuda dispatch.h
_efficient_attention_forward_native.h
efficient attention forward ops.h
_embedding_bag.h
embedding bag backward.h
_embedding_bag_backward_cpu_dispatch.h
embedding bag backward cuda dispatch.h
_embedding_bag_backward_native.h
embedding bag backward ops.h
\verb|_embedding_bag_composite explicit autograd_dispatch.h|
embedding bag cpu dispatch.h
_embedding_bag_cuda_dispatch.h
_embedding_bag_dense_backward.h
_embedding_bag_dense_backward_compositeexplicitautograd_dispatch.h
_embedding_bag_dense_backward_cpu_dispatch.h
_embedding_bag_dense_backward cuda dispatch.h
_embedding_bag_dense_backward_native.h
_embedding_bag_dense_backward_ops.h
_embedding_bag_forward_only.h
embedding bag forward only compositeexplicitautograd dispatch.h
_embedding_bag_forward_only_cpu_dispatch.h
embedding bag forward only cuda dispatch.h
```

```
_embedding_bag_forward_only_native.h
embedding bag forward only ops.h
_embedding_bag_native.h
embedding bag ops.h
_embedding_bag_per_sample_weights_backward.h
embedding bag per sample weights backward compositeexplicitautograd dispatch.h
_embedding_bag_per_sample_weights_backward_cpu_dispatch.h
embedding bag per sample weights backward cuda dispatch.h
embedding bag per sample weights backward native.h
_embedding_bag_per_sample_weights_backward_ops.h
embedding bag sparse backward.h
_embedding_bag_sparse_backward_compositeimplicitautograd_dispatch.h
embedding bag sparse backward native.h
_embedding_bag_sparse_backward_ops.h
empty affine quantized.h
_empty_affine_quantized_compositeexplicitautograd_dispatch.h
empty affine quantized cpu dispatch.h
_empty_affine_quantized_native.h
empty affine quantized ops.h
_empty_per_channel_affine_quantized.h
empty per channel affine quantized compositeexplicitautograd dispatch.h
_empty_per_channel_affine_quantized_cpu_dispatch.h
empty per channel affine quantized native.h
_empty_per_channel_affine_quantized_ops.h
euclidean dist.h
euclidean dist compositeexplicitautograd dispatch.h
_euclidean_dist_native.h
euclidean dist ops.h
_fake_quantize_learnable_per_channel_affine.h
fake quantize learnable per channel affine backward.h
_fake_quantize_learnable_per_channel_affine_backward_cpu_dispatch.h
fake quantize learnable per channel affine backward cuda dispatch.h
_fake_quantize_learnable_per_channel_affine_backward_native.h
fake quantize learnable per channel affine backward ops.h
_fake_quantize_learnable_per_channel_affine_compositeexplicitautograd_dispatch.h
fake quantize learnable per channel affine cpu dispatch.h
_fake_quantize_learnable_per_channel_affine_cuda_dispatch.h
fake quantize learnable per channel affine native.h
_fake_quantize_learnable_per_channel_affine_ops.h
fake quantize learnable per tensor affine.h
_fake_quantize_learnable_per_tensor_affine_backward.h
_fake_quantize_learnable_per_tensor_affine_backward_cpu_dispatch.h
_fake_quantize_learnable_per_tensor_affine_backward_cuda_dispatch.h
_fake_quantize_learnable_per_tensor_affine_backward_native.h
fake quantize learnable per tensor affine backward ops.h
\verb|_fake_quantize_learnable_per_tensor_affine_composite explicit autograd_dispatch.h|
_fake_quantize_learnable_per_tensor_affine_cpu_dispatch.h
_fake_quantize_learnable_per_tensor_affine_cuda_dispatch.h
fake quantize learnable per tensor affine native.h
_fake_quantize_learnable_per_tensor_affine_ops.h
fake quantize per tensor affine cachemask tensor qparams.h
```

```
_fake_quantize_per_tensor_affine_cachemask_tensor_qparams_compositeexplicitautograd_dispatch.h
fake quantize per tensor affine cachemask tensor qparams cpu dispatch.h
_fake_quantize_per_tensor_affine_cachemask_tensor_qparams_cuda_dispatch.h
fake quantize per tensor affine cachemask tensor qparams native.h
_fake_quantize_per_tensor_affine_cachemask_tensor_qparams_ops.h
fft c2c.h
_fft_c2c_cpu_dispatch.h
_fft_c2c_cuda_dispatch.h
_fft_c2c_native.h
_fft_c2c_ops.h
fft c2r.h
_fft_c2r_cpu_dispatch.h
fft c2r cuda dispatch.h
_fft_c2r_native.h
fft c2r ops.h
_fft_r2c.h
_fft_r2c_cpu_dispatch.h
_fft_r2c_cuda_dispatch.h
fft r2c native.h
_fft_r2c_ops.h
fill mem eff dropout mask.h
_fill_mem_eff_dropout_mask_cuda_dispatch.h
fill mem eff dropout mask meta dispatch.h
_fill_mem_eff_dropout_mask_native.h
fill mem eff dropout mask ops.h
_flash_attention_backward.h
_flash_attention_backward_cuda_dispatch.h
flash attention backward native.h
_flash_attention_backward_ops.h
flash attention forward.h
_flash_attention_forward_cuda_dispatch.h
flash attention forward native.h
_flash_attention_forward_ops.h
foobar.h
_foobar_compositeexplicitautograd_dispatch.h
foobar cpu dispatch.h
_foobar_native.h
foobar ops.h
_foreach_abs.h
foreach abs compositeexplicitautograd dispatch.h
_foreach_abs_cuda_dispatch.h
_foreach_abs_native.h
_foreach_abs_ops.h
foreach acos.h
_foreach_acos_compositeexplicitautograd dispatch.h
_foreach_acos_cuda_dispatch.h
foreach acos native.h
_foreach_acos_ops.h
foreach add.h
_foreach_addcdiv.h
```

foreach addcdiv compositeexplicitautograd dispatch.h

```
_foreach_addcdiv_cuda_dispatch.h
foreach addcdiv native.h
_foreach_addcdiv_ops.h
foreach addcmul.h
_foreach_addcmul_compositeexplicitautograd_dispatch.h
foreach addcmul cuda dispatch.h
_foreach_addcmul_native.h
_foreach_addcmul_ops.h
_foreach_add_compositeexplicitautograd_dispatch.h
_foreach_add_cuda_dispatch.h
foreach add native.h
_foreach_add_ops.h
foreach asin.h
\verb|_foreach_asin_composite explicit autograd_dispatch.h|
foreach asin cuda dispatch.h
_foreach_asin_native.h
_foreach_asin_ops.h
_foreach_atan.h
foreach atan compositeexplicitautograd dispatch.h
_foreach_atan_cuda_dispatch.h
foreach atan native.h
_foreach_atan_ops.h
foreach ceil.h
_foreach_ceil_compositeexplicitautograd_dispatch.h
_foreach_ceil_cuda_dispatch.h
foreach ceil native.h
_foreach_ceil_ops.h
foreach clamp max.h
\verb|_foreach_clamp_max_composite explicit autograd_dispatch.h|
foreach clamp max cuda dispatch.h
_foreach_clamp_max_native.h
_foreach_clamp_max_ops.h
_foreach_clamp_min.h
_foreach_clamp_min_compositeexplicitautograd_dispatch.h
_foreach_clamp_min_cuda_dispatch.h
_foreach_clamp_min_native.h
_foreach_clamp_min_ops.h
foreach copy.h
\verb|_foreach_copy_composite explicit autograd_dispatch.h|
foreach copy cuda dispatch.h
_foreach_copy_native.h
_foreach_copy_ops.h
foreach cos.h
_foreach_cosh.h
foreach cosh compositeexplicitautograd dispatch.h
_foreach_cosh_cuda_dispatch.h
_foreach_cosh_native.h
_foreach_cosh_ops.h
foreach cos compositeexplicitautograd dispatch.h
_foreach_cos_cuda_dispatch.h
foreach cos native.h
```

```
_foreach_cos_ops.h
foreach div.h
_foreach_div_compositeexplicitautograd_dispatch.h
_foreach_div_cuda_dispatch.h
_foreach_div_native.h
foreach div ops.h
_foreach_erf.h
_foreach_erfc.h
_foreach_erfc_compositeexplicitautograd_dispatch.h
_foreach_erfc_cuda_dispatch.h
foreach erfc native.h
_foreach_erfc_ops.h
foreach erf compositeexplicitautograd dispatch.h
_foreach_erf_cuda_dispatch.h
foreach erf native.h
_foreach_erf_ops.h
foreach exp.h
_foreach_expml.h
foreach expm1 compositeexplicitautograd dispatch.h
_foreach_expm1_cuda_dispatch.h
foreach expml native.h
_foreach_expm1_ops.h
foreach exp compositeexplicitautograd dispatch.h
_foreach_exp_cuda_dispatch.h
_foreach_exp_native.h
foreach exp ops.h
_foreach_floor.h
foreach floor compositeexplicitautograd dispatch.h
_foreach_floor_cuda_dispatch.h
foreach floor native.h
_foreach_floor_ops.h
foreach frac.h
_foreach_frac_compositeexplicitautograd_dispatch.h
_foreach_frac_cuda_dispatch.h
_foreach_frac_native.h
foreach frac ops.h
_foreach_lerp.h
foreach lerp compositeexplicitautograd dispatch.h
_foreach_lerp_cuda_dispatch.h
foreach lerp native.h
_foreach_lerp_ops.h
_foreach_lgamma.h
_foreach_lgamma_compositeexplicitautograd_dispatch.h
_foreach_lgamma_cuda_dispatch.h
foreach lgamma native.h
_foreach_lgamma_ops.h
foreach log.h
_foreach_log10.h
foreach log10 compositeexplicitautograd dispatch.h
_foreach_log10_cuda_dispatch.h
foreach log10 native.h
```

```
_foreach_log10_ops.h
foreach log1p.h
_foreach_log1p_compositeexplicitautograd_dispatch.h
_foreach_log1p_cuda_dispatch.h
_foreach_log1p_native.h
foreach log1p ops.h
_foreach_log2.h
_foreach_log2_compositeexplicitautograd_dispatch.h
_foreach_log2_cuda_dispatch.h
_foreach_log2_native.h
foreach log2 ops.h
\_foreach\_log\_composite explicit autograd\_dispatch.h
foreach log cuda dispatch.h
_foreach_log_native.h
foreach log ops.h
_foreach_max.h
_foreach_maximum.h
_foreach_maximum_compositeexplicitautograd_dispatch.h
foreach maximum cuda dispatch.h
_foreach_maximum_native.h
foreach maximum ops.h
\verb|_foreach_max_composite explicit autograd_dispatch.h|
foreach max cuda dispatch.h
_foreach_max_native.h
_foreach_max_ops.h
foreach minimum.h
\verb|_foreach_minimum_composite explicit autograd_dispatch.h|
_foreach_minimum_cuda_dispatch.h
_foreach_minimum_native.h
foreach minimum ops.h
_foreach_mul.h
_foreach_mul_compositeexplicitautograd_dispatch.h
_foreach_mul_cuda_dispatch.h
foreach mul native.h
_foreach_mul_ops.h
foreach neg.h
\_foreach\_neg\_composite explicit autograd\_dispatch.h
foreach neg cuda dispatch.h
_foreach_neg_native.h
foreach neg ops.h
_foreach_norm.h
_foreach_norm_compositeexplicitautograd_dispatch.h
_foreach_norm_cuda_dispatch.h
_foreach_norm_native.h
foreach norm ops.h
_foreach_pow.h
_foreach_pow_compositeexplicitautograd_dispatch.h
_foreach_pow_cuda_dispatch.h
foreach pow native.h
_foreach_pow_ops.h
foreach reciprocal.h
```

```
\_for each\_reciprocal\_composite explicit autograd\_dispatch.h
_foreach_reciprocal_cuda_dispatch.h
_foreach_reciprocal_native.h
foreach reciprocal ops.h
_foreach_round.h
foreach round compositeexplicitautograd dispatch.h
_foreach_round_cuda_dispatch.h
foreach round native.h
_foreach_round_ops.h
_foreach_rsqrt.h
foreach rsqrt compositeexplicitautograd dispatch.h
_foreach_rsqrt_cuda_dispatch.h
foreach rsqrt native.h
_foreach_rsqrt_ops.h
foreach sigmoid.h
\_foreach\_sigmoid\_composite explicit autograd\_dispatch.h
_foreach_sigmoid_cuda_dispatch.h
_foreach_sigmoid_native.h
foreach sigmoid ops.h
_foreach_sign.h
foreach sign compositeexplicitautograd dispatch.h
_foreach_sign_cuda_dispatch.h
foreach sign native.h
_foreach_sign_ops.h
foreach sin.h
foreach sinh.h
_foreach_sinh_compositeexplicitautograd_dispatch.h
foreach sinh cuda dispatch.h
_foreach_sinh_native.h
foreach sinh ops.h
_foreach_sin_compositeexplicitautograd_dispatch.h
_foreach_sin_cuda_dispatch.h
_foreach_sin_native.h
foreach sin ops.h
_foreach_sqrt.h
_foreach_sqrt_compositeexplicitautograd_dispatch.h
_foreach_sqrt_cuda_dispatch.h
foreach sqrt native.h
_foreach_sqrt_ops.h
foreach sub.h
\verb|_foreach_sub_composite explicit autograd_dispatch.h|
_foreach_sub_cuda_dispatch.h
_foreach_sub_native.h
_foreach_sub_ops.h
foreach tan.h
_foreach_tanh.h
_foreach_tanh_compositeexplicitautograd_dispatch.h
_foreach_tanh_cuda_dispatch.h
foreach tanh native.h
_foreach_tanh_ops.h
foreach tan compositeexplicitautograd dispatch.h
```

```
_foreach_tan_cuda_dispatch.h
foreach tan native.h
_foreach_tan_ops.h
foreach trunc.h
_foreach_trunc_compositeexplicitautograd_dispatch.h
foreach trunc cuda dispatch.h
_foreach_trunc_native.h
foreach trunc ops.h
foreach zero.h
_foreach_zero_compositeexplicitautograd_dispatch.h
foreach zero cuda dispatch.h
_foreach_zero_native.h
foreach zero ops.h
_functional_assert_async.h
functional assert async cpu dispatch.h
_functional_assert_async_native.h
_functional_assert_async_ops.h
_functional_assert_scalar.h
functional assert scalar compositeexplicitautograd dispatch.h
_functional_assert_scalar_native.h
functional assert scalar ops.h
_functional_sym_constrain_range.h
functional sym constrain range compositeexplicitautograd dispatch.h
_functional_sym_constrain_range_for_size.h
functional sym constrain range for size composite explicit autograd dispatch.h
_functional_sym_constrain_range_for_size_native.h
_functional_sym_constrain_range_for_size_ops.h
functional sym constrain range native.h
_functional_sym_constrain_range_ops.h
fused adagrad.h
\verb|_fused_adagrad_composite explicit autograd_dispatch.h|
_fused_adagrad_cpu_dispatch.h
_fused_adagrad_native.h
fused adagrad ops.h
_fused_adam.h
fused adamw.h
\verb|_fused_adamw_composite explicit autograd_dispatch.h|
fused adamw cpu dispatch.h
_fused_adamw_cuda_dispatch.h
fused adamw native.h
_fused_adamw_ops.h
_fused_adam_compositeexplicitautograd_dispatch.h
_fused_adam_cpu_dispatch.h
_fused_adam_cuda_dispatch.h
fused adam native.h
_fused_adam_ops.h
fused dropout.h
_fused_dropout_compositeexplicitautograd_dispatch.h
fused dropout cuda dispatch.h
_fused_dropout_native.h
fused dropout ops.h
```

```
_fused_moving_avg_obs_fq_helper.h
fused moving avg obs fq helper compositeexplicitautograd dispatch.h
_fused_moving_avg_obs_fq_helper_cpu_dispatch.h
fused moving avg obs fq helper cuda dispatch.h
_fused_moving_avg_obs_fq_helper_native.h
fused moving avg obs fq helper ops.h
_fused_sdp_choice.h
_fused_sdp_choice_cpu_dispatch.h
fused sdp choice cuda dispatch.h
_fused_sdp_choice_meta_dispatch.h
fused sdp choice native.h
_fused_sdp_choice_ops.h
fused sqd.h
_fused_sgd_compositeexplicitautograd_dispatch.h
fused sgd cpu dispatch.h
_fused_sgd_cuda_dispatch.h
fused sgd native.h
_fused_sgd_ops.h
fw primal.h
_fw_primal_compositeexplicitautograd_dispatch.h
fw primal copy.h
\verb|_fw_primal_copy_composite explicit autograd nonfunctional_dispatch.h|
fw primal copy compositeexplicitautograd dispatch.h
_fw_primal_copy_native.h
_fw_primal_copy_ops.h
fw primal native.h
_fw_primal_ops.h
gather sparse backward.h
_gather_sparse_backward_compositeimplicitautograd_dispatch.h
gather sparse backward native.h
_gather_sparse_backward_ops.h
grid sampler 2d cpu fallback.h
_grid_sampler_2d_cpu_fallback_backward.h
grid sampler 2d cpu fallback backward compositeimplicitautograd dispatch.h
_grid_sampler_2d_cpu_fallback_backward_native.h
grid sampler 2d cpu fallback backward ops.h
_grid_sampler_2d_cpu_fallback_compositeexplicitautograd_dispatch.h
grid sampler 2d cpu fallback native.h
_grid_sampler_2d_cpu_fallback_ops.h
has compatible shallow copy type.h
_has_compatible_shallow_copy_type_compositeimplicitautograd_dispatch.h
_has_compatible_shallow_copy_type_native.h
has compatible shallow copy type ops.h
_has_same_storage_numel.h
has same storage numel compositeexplicitautograd dispatch.h
_has_same_storage_numel_native.h
_has_same_storage_numel ops.h
_histogramdd_bin_edges.h
histogramdd bin edges compositeexplicitautograd dispatch.h
_histogramdd_bin_edges_cpu_dispatch.h
histogramdd bin edges native.h
```

```
_histogramdd_bin_edges_ops.h
histogramdd from bin cts.h
_histogramdd_from_bin_cts_compositeexplicitautograd_dispatch.h
histogramdd from bin cts cpu dispatch.h
_histogramdd_from_bin_cts_native.h
histogramdd from bin cts ops.h
_histogramdd_from_bin_tensors.h
histogramdd from bin tensors compositeexplicitautograd dispatch.h
_histogramdd_from_bin_tensors_cpu_dispatch.h
_histogramdd_from_bin_tensors_native.h
histogramdd from bin tensors ops.h
index_put_impl.h
index put impl compositeexplicitautograd dispatch.h
_index_put_impl_cpu_dispatch.h
index put impl cuda dispatch.h
_index_put_impl_meta_dispatch.h
index put impl native.h
_index_put_impl_ops.h
indices.h
_indices_copy.h
indices copy compositeexplicitautogradnonfunctional dispatch.h
_indices_copy_compositeexplicitautograd_dispatch.h
_indices_copy_native.h
indices_copy_ops.h
_indices_native.h
indices ops.h
_int_mm.h
int mm cpu dispatch.h
_int_mm_cuda_dispatch.h
int mm native.h
_int_mm_ops.h
is all true.h
_is_all_true_compositeexplicitautograd_dispatch.h
is all true native.h
_is_all_true_ops.h
is any true.h
_is_any_true_compositeexplicitautograd_dispatch.h
is any true native.h
_is_any_true_ops.h
is zerotensor.h
_is_zerotensor_compositeimplicitautograd_dispatch.h
_is_zerotensor_native.h
_is_zerotensor_ops.h
_jagged_to_padded_dense_forward.h
jagged to padded dense forward cpu dispatch.h
_jagged_to_padded_dense_forward_cuda_dispatch.h
jagged to padded dense forward native.h
_jagged_to_padded_dense_forward_ops.h
lazy clone.h
_lazy_clone_compositeexplicitautograd_dispatch.h
lazy clone native.h
```

```
_lazy_clone_ops.h
linalg check errors.h
_linalg_check_errors_compositeexplicitautograd_dispatch.h
linalg check errors native.h
_linalg_check_errors_ops.h
linalg det.h
\verb|_linalg_det_composite explicit autograd non functional_dispatch.h|
linalg det cpu dispatch.h
_linalg_det_cuda_dispatch.h
_linalg_det_meta.h
linalg det meta dispatch.h
_linalg_det_native.h
linalg det ops.h
_linalg_eigh.h
linalg eigh compositeexplicitautogradnonfunctional dispatch.h
_linalg_eigh_cpu_dispatch.h
_linalg_eigh_cuda_dispatch.h
_linalg_eigh_meta.h
linalg eigh meta dispatch.h
_linalg_eigh_native.h
linalg eigh ops.h
_linalg_eigvals.h
linalg eigvals cpu dispatch.h
_linalg_eigvals_cuda_dispatch.h
linalg eigvals native.h
_linalg_eigvals_ops.h
_linalg_slogdet.h
linalg slogdet compositeexplicitautogradnonfunctional dispatch.h
_linalg_slogdet_cpu_dispatch.h
linalg slogdet cuda dispatch.h
_linalg_slogdet_meta.h
linalg slogdet meta dispatch.h
_linalg_slogdet_native.h
linalg slogdet ops.h
_linalg_solve_ex.h
linalg solve ex compositeexplicitautogradnonfunctional dispatch.h
_linalg_solve_ex_cpu_dispatch.h
linalg solve ex cuda dispatch.h
_linalg_solve_ex_meta.h
linalg solve ex meta dispatch.h
_linalg_solve_ex_native.h
_linalg_solve_ex_ops.h
linalg svd.h
_linalg_svd_compositeexplicitautogradnonfunctional_dispatch.h
linalg svd cpu dispatch.h
_linalg_svd_cuda_dispatch.h
_linalg_svd_meta.h
_linalg_svd_meta_dispatch.h
linalg svd native.h
_linalg_svd_ops.h
local scalar dense.h
```

```
_local_scalar_dense_cpu_dispatch.h
local scalar dense cuda dispatch.h
_local_scalar_dense_native.h
local scalar dense ops.h
_logcumsumexp.h
logcumsumexp cpu dispatch.h
_logcumsumexp_cuda_dispatch.h
logcumsumexp native.h
logcumsumexp ops.h
_log_softmax.h
log softmax backward data.h
\verb| log_softmax_backward_data_composite explicit autograd nonfunctional_dispatch.h|
log softmax backward data cpu dispatch.h
_log_softmax_backward_data_cuda_dispatch.h
log softmax backward data meta.h
_log_softmax_backward_data_meta_dispatch.h
log softmax backward data native.h
_log_softmax_backward_data_ops.h
log softmax compositeexplicitautogradnonfunctional dispatch.h
_log_softmax_cpu_dispatch.h
log softmax cuda dispatch.h
_log_softmax_meta.h
log softmax meta dispatch.h
_log_softmax_native.h
log softmax ops.h
lstm mps.h
\verb|_lstm_mps_composite explicit autograd_dispatch.h|
lstm mps native.h
_lstm_mps_ops.h
lu with info.h
\verb|_lu_with_info_composite implicit autograd_dispatch.h|
_lu_with_info_native.h
_lu_with_info_ops.h
make dep token.h
_make_dep_token_cpu_dispatch.h
make dep token native.h
_make_dep_token_ops.h
make dual.h
\verb|_make_dual_composite explicit autograd_dispatch.h|
make dual copy.h
\verb|_make_dual_copy_composite explicit autograd nonfunctional_dispatch.h|
_make_dual_copy_compositeexplicitautograd_dispatch.h
_make_dual_copy_native.h
_make_dual_copy_ops.h
make dual native.h
_make_dual_ops.h
_make_per_channel_quantized_tensor.h
_make_per_channel_quantized_tensor_compositeexplicitautograd_dispatch.h
_make_per_channel_quantized_tensor_cpu_dispatch.h
_make_per_channel_quantized_tensor_cuda_dispatch.h
make per channel quantized tensor native.h
```

```
_make_per_channel_quantized_tensor_ops.h
make per tensor quantized tensor.h
_make_per_tensor_quantized_tensor_compositeexplicitautograd_dispatch.h
make per tensor quantized tensor cpu dispatch.h
_make_per_tensor_quantized_tensor_cuda_dispatch.h
make per tensor quantized tensor native.h
_make_per_tensor_quantized_tensor_ops.h
masked scale.h
masked scale compositeexplicitautograd dispatch.h
_masked_scale_cuda_dispatch.h
masked scale native.h
_masked_scale_ops.h
masked softmax.h
_masked_softmax_backward.h
masked softmax backward compositeexplicitautograd dispatch.h
_masked_softmax_backward_cpu_dispatch.h
masked softmax backward cuda dispatch.h
_masked_softmax_backward_native.h
masked softmax backward ops.h
\verb|_masked_softmax_composite explicit autograd_dispatch.h|
masked softmax cpu dispatch.h
_masked_softmax_cuda_dispatch.h
masked softmax native.h
_masked_softmax_ops.h
mixed dtypes linear.h
mixed dtypes linear cuda dispatch.h
_mixed_dtypes_linear_native.h
mixed dtypes linear ops.h
_mkldnn_reshape.h
_mkldnn_reshape_compositeexplicitautograd dispatch.h
_mkldnn_reshape_native.h
mkldnn reshape ops.h
_mkldnn_transpose.h
mkldnn transpose compositeexplicitautograd dispatch.h
_mkldnn_transpose_meta_dispatch.h
mkldnn transpose native.h
_mkldnn_transpose_ops.h
mps convolution.h
\verb|_mps_convolution_composite explicit autograd_dispatch.h|
mps convolution native.h
_mps_convolution_ops.h
_mps_convolution_transpose.h
_mps_convolution_transpose_compositeexplicitautograd_dispatch.h
_mps_convolution_transpose_native.h
mps convolution transpose ops.h
_native_batch_norm_legit.h
_native_batch_norm_legit_compositeexplicitautograd_dispatch.h
_native_batch_norm_legit_cpu_dispatch.h
native batch norm legit cuda dispatch.h
_native_batch_norm_legit_native.h
native batch norm legit no training.h
```

```
_native_batch_norm_legit_no_training_compositeexplicitautograd_dispatch.h
native batch norm legit no training native.h
_native_batch_norm_legit_no_training_ops.h
native batch norm legit ops.h
_native_multi_head_attention.h
native multi head attention compositeexplicitautograd dispatch.h
_native_multi_head_attention_cpu_dispatch.h
native multi head attention cuda dispatch.h
_native_multi_head_attention_native.h
_native_multi_head_attention_ops.h
neg view.h
_neg_view_compositeexplicitautograd_dispatch.h
neg view copy.h
_neg_view_copy_compositeexplicitautogradnonfunctional_dispatch.h
_neg_view_copy_compositeexplicitautograd dispatch.h
_neg_view_copy_native.h
neg view copy ops.h
_neg_view_native.h
neg view ops.h
_nested_compute_contiguous_strides_offsets.h
nested compute contiguous strides offsets cpu dispatch.h
_nested_compute_contiguous_strides_offsets_cuda_dispatch.h
nested compute contiguous strides offsets native.h
\verb|_nested_compute_contiguous_strides_offsets_ops.h|
nested from padded.h
nested from padded and nested example.h
_nested_from_padded_and_nested_example_compositeexplicitautograd_dispatch.h
nested from padded and nested example native.h
_nested_from_padded_and_nested_example_ops.h
nested from padded compositeexplicitautograd dispatch.h
_nested_from_padded_cpu_dispatch.h
nested from padded cuda dispatch.h
_nested_from_padded_native.h
nested from padded ops.h
_nested_from_padded_tensor.h
nested from padded tensor native.h
_nested_from_padded_tensor_ops.h
nested get jagged dummy.h
_nested_get_jagged_dummy_native.h
nested get jagged dummy ops.h
_nested_get_lengths.h
_nested_get_lengths_native.h
_nested_get_lengths_ops.h
_nested_get_max_seqlen.h
nested get max seqlen native.h
_nested_get_max_seqlen_ops.h
_nested_get_min_seqlen.h
_nested_get_min_seqlen_native.h
nested get min seqlen ops.h
_nested_get_offsets.h
nested get offsets native.h
```

```
_nested_get_offsets_ops.h
nested get ragged idx.h
_nested_get_ragged_idx_native.h
nested get ragged idx ops.h
_nested_get_values.h
nested get values copy.h
\verb|_nested_get_values_copy_composite explicit autograd nonfunctional_dispatch.h|
nested get values copy compositeexplicitautograd dispatch.h
_nested_get_values_copy_native.h
_nested_get_values_copy_ops.h
nested get values native.h
_nested_get_values_ops.h
nested select backward.h
_nested_select_backward_native.h
nested select backward ops.h
_nested_sum_backward.h
nested sum backward native.h
_nested_sum_backward_ops.h
nested tensor from mask.h
_nested_tensor_from_mask_compositeexplicitautograd_dispatch.h
nested tensor from mask cpu dispatch.h
_nested_tensor_from_mask_cuda_dispatch.h
nested tensor from mask left aligned.h
_nested_tensor_from_mask_left_aligned_cpu_dispatch.h
nested tensor from mask left aligned cuda dispatch.h
_nested_tensor_from_mask_left_aligned_native.h
_nested_tensor_from_mask_left_aligned_ops.h
nested tensor from mask native.h
_nested_tensor_from_mask_ops.h
nested tensor from tensor list.h
_nested_tensor_from_tensor_list_compositeexplicitautograd_dispatch.h
nested tensor from tensor list native.h
_nested_tensor_from_tensor_list_ops.h
nested tensor size.h
_nested_tensor_size_compositeexplicitautograd_dispatch.h
nested tensor size native.h
_nested_tensor_size_ops.h
nested tensor softmax with shape.h
_nested_tensor_softmax_with_shape_native.h
nested tensor softmax with shape ops.h
_nested_tensor_storage_offsets.h
_nested_tensor_storage_offsets_compositeexplicitautograd_dispatch.h
_nested_tensor_storage_offsets_native.h
_nested_tensor_storage_offsets_ops.h
nested tensor strides.h
_nested_tensor_strides_compositeexplicitautograd_dispatch.h
nested tensor strides native.h
_nested_tensor_strides_ops.h
nested view from buffer.h
_nested_view_from_buffer_copy.h
nested view from buffer copy compositeexplicitautogradnonfunctional dispatch.h
```

```
_nested_view_from_buffer_copy_compositeexplicitautograd_dispatch.h
                   nested view from buffer copy native.h
                   _nested_view_from_buffer_copy_ops.h
                    nested view from buffer cpu dispatch.h
                   _nested_view_from_buffer_cuda_dispatch.h
                   nested view from buffer native.h
                   _nested_view_from_buffer_ops.h
                    nested view from jagged.h
                   nested view from jagged copy.h
                   \verb|_nested_view_from_jagged_copy_composite explicit autograd nonfunctional_dispatch.h|
                    nested view from jagged copy compositeexplicitautograd dispatch.h
                    _nested_view_from_jagged_copy_native.h
                   nested view from jagged copy ops.h
                   _nested_view_from_jagged_native.h
                    _nested_view_from_jagged ops.h
                   _new_zeros_with_same_feature_meta.h
                   new zeros with same feature meta compositeexplicitautograd dispatch.h
                   _new_zeros_with_same_feature_meta_native.h
                    new zeros with same feature meta ops.h
                    nnpack available.h
                   nnpack available compositeimplicitautograd dispatch.h
                   _nnpack_available_native.h
                    nnpack available ops.h
                   _nnpack_spatial_convolution.h
                    nnpack spatial convolution composite explicit autograd dispatch.h
                    nnpack spatial convolution native.h
                    _nnpack_spatial_convolution_ops.h
                   nnz.h
                   _nnz_native.h
                    nnz ops.h
                    _pack_padded_sequence.h
                   pack padded sequence backward.h
                   _pack_padded_sequence_backward_compositeimplicitautograd_dispatch.h
                    pack padded sequence backward native.h
                    _pack_padded_sequence_backward_ops.h
                   pack padded sequence compositeexplicitautograd dispatch.h
                   _pack_padded_sequence_native.h
                    pack padded sequence ops.h
                    _padded_dense_to_jagged_forward.h
                   padded dense to jagged forward cpu dispatch.h
                    _padded_dense_to_jagged_forward_cuda_dispatch.h
                    _padded_dense_to_jagged_forward_native.h
                   _padded_dense_to_jagged_forward_ops.h
                   pad circular.h
                   pad circular compositeimplicitautograd dispatch.h
                   _pad_circular_native.h
                   pad circular ops.h
                   _pad_enum.h
                   pad enum compositeimplicitautograd dispatch.h
                    _pad_enum_native.h
pad enum ops.h
```

```
_pad_packed_sequence.h
pad packed sequence compositeimplicitautograd dispatch.h
_pad_packed_sequence_native.h
pad packed sequence ops.h
_pdist_backward.h
pdist backward compositeexplicitautograd dispatch.h
_pdist_backward_cpu_dispatch.h
pdist backward cuda dispatch.h
pdist backward native.h
_pdist_backward_ops.h
pdist forward.h
\verb|_pdist_forward_composite explicit autograd_dispatch.h|
pdist forward cpu dispatch.h
_pdist_forward_cuda_dispatch.h
pdist forward native.h
_pdist_forward_ops.h
pin memory.h
_pin_memory_compositeexplicitautograd_dispatch.h
pin memory native.h
_pin_memory_ops.h
prelu kernel.h
_prelu_kernel_backward.h
prelu kernel backward cpu dispatch.h
_prelu_kernel_backward_cuda_dispatch.h
prelu kernel backward native.h
prelu kernel backward ops.h
_prelu_kernel_cpu_dispatch.h
prelu kernel cuda dispatch.h
_prelu_kernel_native.h
prelu kernel ops.h
_print.h
print compositeexplicitautograd dispatch.h
_print_native.h
print ops.h
_propagate_xla_data.h
propagate xla data compositeimplicitautograd dispatch.h
_propagate_xla_data_native.h
propagate xla data ops.h
_remove_batch_dim.h
remove batch dim compositeimplicitautograd dispatch.h
_remove_batch_dim_native.h
_remove_batch_dim_ops.h
_reshape_alias.h
_reshape_alias_copy.h
reshape alias copy compositeexplicitautogradnonfunctional dispatch.h
_reshape_alias_copy_compositeexplicitautograd_dispatch.h
_reshape_alias_copy_native.h
_reshape_alias_copy_ops.h
reshape alias cpu dispatch.h
_reshape_alias_cuda_dispatch.h
reshape alias meta dispatch.h
```

```
_reshape_alias_native.h
reshape alias ops.h
_reshape_copy.h
reshape copy compositeexplicitautograd dispatch.h
_reshape_copy_native.h
reshape copy ops.h
_reshape_from_tensor.h
reshape from tensor compositeimplicitautograd dispatch.h
_reshape_from_tensor_native.h
_reshape_from_tensor_ops.h
resize output.h
_resize_output_compositeexplicitautograd_dispatch.h
resize output meta dispatch.h
_resize_output_native.h
resize output ops.h
_rowwise_prune.h
rowwise prune compositeimplicitautograd dispatch.h
_rowwise_prune_native.h
rowwise prune ops.h
_safe_softmax.h
safe softmax compositeexplicitautograd dispatch.h
_safe_softmax_native.h
safe softmax ops.h
_sample_dirichlet.h
sample dirichlet compositeexplicitautograd dispatch.h
_sample_dirichlet_cpu_dispatch.h
_sample_dirichlet_cuda_dispatch.h
_sample_dirichlet native.h
_sample_dirichlet_ops.h
saturate weight to fp16.h
_saturate_weight_to_fp16_compositeimplicitautograd_dispatch.h
saturate weight to fp16 native.h
_saturate_weight_to_fp16_ops.h
scaled dot product attention math.h
_scaled_dot_product_attention_math_compositeimplicitautograd_dispatch.h
scaled dot product attention math for mps.h
_scaled_dot_product_attention_math_for_mps_native.h
scaled dot product attention math for mps ops.h
_scaled_dot_product_attention_math_native.h
scaled dot product attention math ops.h
_scaled_dot_product_cudnn_attention.h
_scaled_dot_product_cudnn_attention_backward.h
_scaled_dot_product_cudnn_attention_backward_cuda_dispatch.h
_scaled_dot_product_cudnn_attention_backward_native.h
scaled dot product cudnn attention backward ops.h
_scaled_dot_product_cudnn_attention_cuda_dispatch.h
scaled dot product cudnn attention native.h
_scaled_dot_product_cudnn_attention_ops.h
scaled dot product efficient attention.h
_scaled_dot_product_efficient_attention_backward.h
scaled dot product efficient attention backward cuda dispatch.h
```

```
_scaled_dot_product_efficient_attention_backward_native.h
scaled dot product efficient attention backward ops.h
_scaled_dot_product_efficient_attention_cuda_dispatch.h
scaled dot product efficient attention native.h
_scaled_dot_product_efficient_attention_ops.h
scaled dot product flash attention.h
_scaled_dot_product_flash_attention_backward.h
scaled dot product flash attention backward cuda dispatch.h
_scaled_dot_product_flash_attention_backward_native.h
_scaled_dot_product_flash_attention_backward_ops.h
scaled dot product flash attention cuda dispatch.h
_scaled_dot_product_flash_attention_for_cpu.h
scaled dot product flash attention for cpu backward.h
_scaled_dot_product_flash_attention_for_cpu_backward_cpu_dispatch.h
scaled dot product flash attention for cpu backward native.h
_scaled_dot_product_flash_attention_for_cpu_backward_ops.h
scaled dot product flash attention for cpu cpu dispatch.h
_scaled_dot_product_flash_attention_for_cpu_native.h
scaled dot product flash attention for cpu ops.h
_scaled_dot_product_flash_attention_native.h
scaled dot product flash attention ops.h
_scaled_dot_product_fused_attention_overrideable.h
scaled dot product fused attention overrideable backward.h
_scaled_dot_product_fused_attention_overrideable_backward_compositeexplicitautograd_dispatch.h
scaled dot product fused attention overrideable backward native.h
_scaled_dot_product_fused_attention_overrideable_backward_ops.h
scaled dot product fused attention overrideable compositeexplicitautograd dispatch.h
scaled dot product fused attention overrideable native.h
_scaled_dot_product_fused_attention_overrideable_ops.h
scaled mm.h
_scaled_mm_cuda_dispatch.h
scaled mm native.h
_scaled_mm_ops.h
segment reduce backward.h
_segment_reduce_backward_compositeexplicitautograd_dispatch.h
segment reduce backward cpu dispatch.h
_segment_reduce_backward_cuda_dispatch.h
segment reduce backward native.h
_segment_reduce_backward_ops.h
shape as tensor.h
_shape_as_tensor_compositeimplicitautograd_dispatch.h
_shape_as_tensor_native.h
_shape_as_tensor_ops.h
slow conv2d backward.h
slow conv2d backward compositeexplicitautograd dispatch.h
_slow_conv2d_backward_cpu_dispatch.h
slow conv2d backward cuda dispatch.h
_slow_conv2d_backward_native.h
slow conv2d backward ops.h
_slow_conv2d_forward.h
slow conv2d forward cpu dispatch.h
```

```
_slow_conv2d_forward_cuda_dispatch.h
slow conv2d forward native.h
_slow_conv2d_forward_ops.h
sobol engine draw.h
_sobol_engine_draw_compositeimplicitautograd_dispatch.h
sobol engine draw native.h
_sobol_engine_draw_ops.h
sobol engine ff.h
_sobol_engine_ff_compositeimplicitautograd_dispatch.h
_sobol_engine_ff_native.h
sobol engine ff ops.h
_sobol_engine_initialize_state.h
_sobol_engine_initialize_state_compositeimplicitautograd_dispatch.h
_sobol_engine_initialize_state_native.h
sobol engine initialize state ops.h
_sobol_engine_scramble.h
sobol engine scramble compositeimplicitautograd dispatch.h
_sobol_engine_scramble_native.h
sobol engine scramble ops.h
softmax.h
softmax backward data.h
\verb|_softmax_backward_data_composite explicit autograd nonfunctional_dispatch.h|
softmax backward data cpu dispatch.h
_softmax_backward_data_cuda_dispatch.h
softmax backward data meta.h
_softmax_backward_data_meta_dispatch.h
_softmax_backward_data_native.h
softmax backward data ops.h
_softmax_compositeexplicitautogradnonfunctional_dispatch.h
softmax cpu dispatch.h
_softmax_cuda_dispatch.h
softmax meta.h
_softmax_meta_dispatch.h
softmax native.h
_softmax_ops.h
sparse addmm.h
\verb|_sparse_addmm_composite explicit autograd_dispatch.h|
sparse addmm native.h
_sparse_addmm_ops.h
sparse broadcast to.h
_sparse_broadcast_to_copy.h
_sparse_broadcast_to_copy_compositeexplicitautogradnonfunctional_dispatch.h
_sparse_broadcast_to_copy_compositeexplicitautograd_dispatch.h
_sparse_broadcast_to_copy_native.h
sparse broadcast to copy ops.h
_sparse_broadcast_to_native.h
_sparse_broadcast_to_ops.h
_sparse_bsc_tensor_unsafe.h
sparse bsc tensor unsafe compositeimplicitautograd dispatch.h
_sparse_bsc_tensor_unsafe_native.h
sparse bsc tensor unsafe ops.h
```

```
_sparse_bsr_tensor_unsafe.h
                   sparse bsr tensor unsafe compositeimplicitautograd dispatch.h
                   _sparse_bsr_tensor_unsafe_native.h
                   sparse bsr tensor unsafe ops.h
                   _sparse_compressed_tensor_unsafe.h
                   sparse compressed tensor unsafe compositeimplicitautograd dispatch.h
                   _sparse_compressed_tensor_unsafe_native.h
                   sparse compressed tensor unsafe ops.h
                   sparse compressed tensor with dims.h
                   \verb|_sparse_compressed_tensor_with_dims_composite explicit autograd_dispatch.h|
                   sparse compressed tensor with dims native.h
                   _sparse_compressed_tensor_with_dims_ops.h
                   sparse coo tensor unsafe.h
                   _sparse_coo_tensor_unsafe_compositeimplicitautograd_dispatch.h
                    sparse coo tensor unsafe native.h
                   _sparse_coo_tensor_unsafe_ops.h
                   sparse coo tensor with dims.h
                   _sparse_coo_tensor_with_dims_and_tensors.h
                   sparse coo tensor with dims and tensors compositeexplicitautograd dispatch.h
                    _sparse_coo_tensor_with_dims_and_tensors_meta_dispatch.h
                   sparse coo tensor with dims and tensors native.h
                   _sparse_coo_tensor_with_dims_and_tensors_ops.h
                   sparse coo tensor with dims compositeexplicitautograd dispatch.h
                   _sparse_coo_tensor_with_dims_meta_dispatch.h
                   sparse coo tensor with dims native.h
                   sparse coo tensor with dims ops.h
                   sparse csc tensor unsafe.h
                   sparse csc tensor unsafe compositeimplicitautograd dispatch.h
                   _sparse_csc_tensor_unsafe_native.h
                   sparse csc tensor unsafe ops.h
                   _sparse_csr_prod.h
                   sparse csr prod compositeexplicitautograd dispatch.h
                   _sparse_csr_prod_native.h
                   sparse csr prod ops.h
                   _sparse_csr_sum.h
                   sparse csr sum compositeexplicitautograd dispatch.h
                   _sparse_csr_sum_native.h
                   sparse csr sum ops.h
                   _sparse_csr_tensor_unsafe.h
                   sparse csr tensor unsafe compositeimplicitautograd dispatch.h
                   _sparse_csr_tensor_unsafe_native.h
                   _sparse_csr_tensor_unsafe_ops.h
                   _sparse_log_softmax.h
                   _sparse_log_softmax_backward_data.h
                   sparse log softmax backward data compositeexplicitautograd dispatch.h
                   _sparse_log_softmax_backward_data_native.h
                   _sparse_log_softmax_backward data ops.h
                   _sparse_log_softmax_compositeexplicitautograd_dispatch.h
                   sparse log softmax compositeimplicitautograd dispatch.h
                   _sparse_log_softmax_native.h
sparse log softmax ops.h
```

```
_sparse_mask_projection.h
sparse mask projection compositeexplicitautograd dispatch.h
_sparse_mask_projection_native.h
sparse mask projection ops.h
_sparse_mm.h
sparse mm compositeimplicitautograd dispatch.h
_sparse_mm_native.h
sparse mm ops.h
sparse mm reduce impl.h
_sparse_mm_reduce_impl_backward.h
sparse mm reduce impl backward native.h
_sparse_mm_reduce_impl_backward_ops.h
sparse mm reduce impl native.h
_sparse_mm_reduce_impl_ops.h
sparse semi structured addmm.h
_sparse_semi_structured_addmm_cuda_dispatch.h
sparse semi structured addmm native.h
_sparse_semi_structured_addmm_ops.h
sparse semi structured apply.h
_sparse_semi_structured_apply_cuda_dispatch.h
sparse semi structured apply dense.h
_sparse_semi_structured_apply_dense_cuda_dispatch.h
sparse semi structured apply dense native.h
_sparse_semi_structured_apply_dense_ops.h
sparse semi structured apply native.h
sparse semi structured apply ops.h
_sparse_semi_structured_linear.h
sparse semi structured linear cuda dispatch.h
_sparse_semi_structured_linear_native.h
sparse semi structured linear ops.h
_sparse_semi_structured_mm.h
sparse semi structured mm cuda dispatch.h
_sparse_semi_structured_mm_native.h
sparse semi structured mm ops.h
_sparse_semi_structured_tile.h
sparse semi structured tile cuda dispatch.h
_sparse_semi_structured_tile_native.h
sparse semi structured tile ops.h
_sparse_softmax.h
sparse softmax backward data.h
_sparse_softmax_backward_data_compositeexplicitautograd_dispatch.h
_sparse_softmax_backward_data_native.h
_sparse_softmax_backward_data_ops.h
_sparse_softmax_compositeexplicitautograd_dispatch.h
sparse softmax compositeimplicitautograd dispatch.h
_sparse_softmax_native.h
sparse softmax ops.h
_sparse_sparse_matmul.h
sparse sparse matmul compositeexplicitautograd dispatch.h
_sparse_sparse_matmul_native.h
sparse sparse matmul ops.h
```

```
_sparse_sum.h
sparse sum backward.h
_sparse_sum_backward_compositeexplicitautograd_dispatch.h
sparse sum backward native.h
_sparse_sum_backward_ops.h
sparse sum compositeexplicitautograd dispatch.h
_sparse_sum_compositeimplicitautograd_dispatch.h
_sparse_sum_native.h
_sparse_sum_ops.h
_spdiags.h
spdiags compositeexplicitautograd dispatch.h
_spdiags_cpu_dispatch.h
spdiags native.h
_spdiags_ops.h
spsolve.h
_spsolve_native.h
spsolve ops.h
_stack.h
stack compositeexplicitautograd dispatch.h
_stack_cpu_dispatch.h
stack native.h
_stack_ops.h
standard gamma.h
\verb|_standard_gamma_composite explicit autograd_dispatch.h|
_standard_gamma_cpu_dispatch.h
standard gamma cuda dispatch.h
_standard_gamma_grad.h
standard gamma grad compositeexplicitautograd dispatch.h
_standard_gamma_grad_cpu_dispatch.h
standard gamma grad cuda dispatch.h
_standard_gamma_grad_native.h
_standard_gamma_grad_ops.h
_standard_gamma_native.h
standard gamma ops.h
_test_ambiguous_defaults.h
test ambiguous defaults compositeimplicitautograd dispatch.h
_test_ambiguous_defaults_native.h
test ambiguous defaults ops.h
\_{\tt test\_autograd\_multiple\_dispatch.h}
test autograd multiple dispatch compositeexplicitautograd dispatch.h
\_{\tt test\_autograd\_multiple\_dispatch\_compositeimplicitautograd\_dispatch.h}
_test_autograd_multiple_dispatch_native.h
test autograd multiple dispatch ops.h
_test_autograd_multiple_dispatch_view.h
test autograd multiple dispatch view compositeexplicitautograd dispatch.h
_test_autograd_multiple_dispatch_view_copy.h
\_{test\_autograd\_multiple\_dispatch\_view\_copy\_composite explicit autograd nonfunctional\_dispatch.h}
_test_autograd_multiple_dispatch_view_copy_compositeexplicitautograd_dispatch.h
_test_autograd_multiple_dispatch_view_copy_native.h
_test_autograd_multiple_dispatch_view_copy_ops.h
test autograd multiple dispatch view native.h
```

```
_test_autograd_multiple_dispatch_view_ops.h
test check tensor.h
_test_check_tensor_compositeimplicitautograd_dispatch.h
test check tensor native.h
_test_check_tensor_ops.h
test functorch fallback.h
\verb|_test_functorch_fallback_composite explicit autograd_dispatch.h|
_test_functorch_fallback_cpu_dispatch.h
_test_functorch_fallback_native.h
_test_functorch_fallback_ops.h
test optional filled intlist.h
_test_optional_filled_intlist_compositeexplicitautograd_dispatch.h
test optional filled_intlist_cpu_dispatch.h
_test_optional_filled_intlist_native.h
test optional filled intlist ops.h
_test_optional_floatlist.h
test optional floatlist compositeexplicitautograd dispatch.h
_test_optional_floatlist_cpu_dispatch.h
test optional floatlist native.h
_test_optional_floatlist_ops.h
test optional intlist.h
_test_optional_intlist_compositeexplicitautograd_dispatch.h
test optional intlist cpu dispatch.h
_test_optional_intlist_native.h
test optional intlist ops.h
test parallel materialize.h
_test_parallel_materialize_compositeexplicitautograd_dispatch.h
test parallel materialize native.h
_test_parallel_materialize_ops.h
test serialization subcmul.h
_test_serialization_subcmul_compositeimplicitautograd_dispatch.h
test serialization subcmul native.h
_test_serialization_subcmul_ops.h
test string default.h
_test_string_default_compositeimplicitautograd_dispatch.h
test string default native.h
_test_string_default_ops.h
test warn in autograd.h
\_{\tt test\_warn\_in\_autograd\_composite}{\tt explicitautograd\_dispatch.h}
test warn in autograd native.h
_test_warn_in_autograd_ops.h
_thnn_differentiable_gru_cell_backward.h
thnn differentiable gru cell backward compositeimplicitautograd dispatch.h
_thnn_differentiable_gru_cell_backward_native.h
_thnn_differentiable_gru_cell_backward_ops.h
_thnn_differentiable_lstm_cell_backward.h
_thnn_differentiable_lstm_cell_backward_compositeimplicitautograd_dispatch.h
_thnn_differentiable_lstm_cell_backward_native.h
thnn differentiable 1stm cell backward ops.h
_thnn_fused_gru_cell.h
thnn fused gru cell backward.h
```

```
_thnn_fused_gru_cell_backward_compositeexplicitautograd_dispatch.h
thnn fused gru cell backward cuda dispatch.h
_thnn_fused_gru_cell_backward_native.h
thnn fused gru cell backward ops.h
_thnn_fused_gru_cell_compositeexplicitautograd_dispatch.h
thnn fused gru cell cuda dispatch.h
_thnn_fused_gru_cell_native.h
_thnn_fused_gru_cell_ops.h
thnn fused 1stm cell.h
_thnn_fused_lstm_cell_backward.h
thnn fused 1stm cell backward compositeimplicitautograd dispatch.h
_thnn_fused_lstm_cell_backward_impl.h
thnn fused 1stm cell backward impl compositeexplicitautograd dispatch.h
_thnn_fused_lstm_cell_backward_impl_cuda_dispatch.h
thnn fused 1stm cell backward impl native.h
_thnn_fused_lstm_cell_backward_impl_ops.h
_thnn_fused_lstm_cell_backward_native.h
_thnn_fused_lstm_cell_backward_ops.h
thnn fused 1stm cell compositeexplicitautograd dispatch.h
_thnn_fused_lstm_cell_cuda_dispatch.h
thnn fused 1stm cell native.h
_thnn_fused_lstm_cell_ops.h
to copy.h
_to_copy_compositeexplicitautograd_dispatch.h
to copy native.h
_to_copy_ops.h
_to_cpu.h
to cpu compositeimplicitautograd dispatch.h
_to_cpu_native.h
to cpu ops.h
_to_dense.h
to dense compositeexplicitautograd dispatch.h
_to_dense_native.h
to dense ops.h
_to_sparse.h
to sparse bsc.h
_to_sparse_bsc_compositeexplicitautograd_dispatch.h
to sparse bsc cpu dispatch.h
_to_sparse_bsc_cuda_dispatch.h
to sparse bsc native.h
_to_sparse_bsc_ops.h
_to_sparse_bsr.h
_to_sparse_bsr_compositeexplicitautograd_dispatch.h
_to_sparse_bsr_cpu_dispatch.h
to sparse bsr cuda dispatch.h
_to_sparse_bsr_native.h
_to_sparse_bsr_ops.h
_to_sparse_compositeexplicitautograd_dispatch.h
to sparse cpu dispatch.h
_to_sparse_csc.h
to sparse csc compositeexplicitautograd dispatch.h
```

```
_to_sparse_csc_cpu_dispatch.h
to sparse csc cuda dispatch.h
_to_sparse_csc_native.h
to sparse csc ops.h
_to_sparse_csr.h
to sparse csr compositeexplicitautograd dispatch.h
_to_sparse_csr_cpu_dispatch.h
to sparse csr cuda dispatch.h
_to_sparse_csr_native.h
_to_sparse_csr_ops.h
to sparse cuda dispatch.h
_to_sparse_native.h
to sparse ops.h
_to_sparse_semi_structured.h
to sparse semi structured cuda dispatch.h
_to_sparse_semi_structured_native.h
to sparse semi structured ops.h
_transformer_encoder_layer_fwd.h
transformer encoder layer fwd compositeexplicitautograd dispatch.h
_transformer_encoder_layer_fwd_cpu_dispatch.h
transformer encoder layer fwd cuda dispatch.h
_transformer_encoder_layer_fwd_native.h
transformer encoder layer fwd ops.h
transform_bias_rescale_qkv.h
transform bias rescale qkv compositeexplicitautograd dispatch.h
transform bias rescale qkv cpu dispatch.h
_transform_bias_rescale_qkv_cuda_dispatch.h
transform bias rescale qkv native.h
_transform_bias_rescale_qkv_ops.h
trilinear.h
_trilinear_compositeexplicitautogradnonfunctional_dispatch.h
trilinear compositeexplicitautograd dispatch.h
_trilinear_native.h
trilinear ops.h
_triton_multi_head_attention.h
triton multi head attention compositeexplicitautograd dispatch.h
_triton_multi_head_attention_cuda_dispatch.h
triton multi head attention native.h
_triton_multi_head_attention_ops.h
triton scaled dot attention.h
_triton_scaled_dot_attention_compositeexplicitautograd_dispatch.h
_triton_scaled_dot_attention_cuda_dispatch.h
_triton_scaled_dot_attention_native.h
_triton_scaled_dot_attention_ops.h
unique.h
unique2.h
unique2 compositeexplicitautograd dispatch.h
_unique2_cpu_dispatch.h
unique2 cuda dispatch.h
_unique2_native.h
unique2 ops.h
```

```
_unique_compositeexplicitautograd_dispatch.h
unique cpu dispatch.h
_unique_cuda_dispatch.h
unique native.h
_unique_ops.h
unpack dual.h
_unpack_dual_compositeimplicitautograd_dispatch.h
unpack dual native.h
unpack dual ops.h
_unsafe_index.h
unsafe index compositeexplicitautograd dispatch.h
_unsafe_index_native.h
unsafe index ops.h
_unsafe_index_put.h
unsafe index put compositeexplicitautograd dispatch.h
_unsafe_index_put_native.h
unsafe index put ops.h
_unsafe_masked_index.h
unsafe masked index compositeexplicitautograd dispatch.h
_unsafe_masked_index_native.h
unsafe masked index ops.h
_unsafe_masked_index_put_accumulate.h
unsafe masked index put accumulate compositeexplicitautograd dispatch.h
_unsafe_masked_index_put_accumulate_native.h
unsafe masked index put accumulate ops.h
unsafe view.h
\verb| \_unsafe\_view\_composite explicit autograd\_dispatch.h|
unsafe view native.h
_unsafe_view_ops.h
upsample bicubic2d aa.h
_upsample_bicubic2d_aa_backward.h
upsample bicubic2d aa backward compositeexplicitautogradnonfunctional dispatch.h
_upsample_bicubic2d_aa_backward_cpu_dispatch.h
upsample bicubic2d aa backward cuda dispatch.h
_upsample_bicubic2d_aa_backward_meta.h
upsample bicubic2d aa backward meta dispatch.h
_upsample_bicubic2d_aa_backward_native.h
upsample bicubic2d aa backward ops.h
\verb| _upsample_bicubic2d_aa_composite explicit autograd nonfunctional_dispatch.h|
upsample bicubic2d aa compositeimplicitautograd dispatch.h
_upsample_bicubic2d_aa_cpu_dispatch.h
_upsample_bicubic2d_aa_cuda_dispatch.h
upsample bicubic2d aa meta.h
_upsample_bicubic2d_aa_meta_dispatch.h
upsample bicubic2d aa native.h
_upsample_bicubic2d_aa_ops.h
upsample bilinear2d aa.h
_upsample_bilinear2d_aa_backward.h
upsample bilinear2d aa backward compositeexplicitautogradnonfunctional dispatch.h
_upsample_bilinear2d_aa_backward_cpu_dispatch.h
upsample bilinear2d aa backward cuda dispatch.h
```

```
_upsample_bilinear2d_aa_backward_meta.h
upsample bilinear2d aa backward meta dispatch.h
_upsample_bilinear2d_aa_backward_native.h
upsample bilinear2d aa backward ops.h
_upsample_bilinear2d_aa_compositeexplicitautogradnonfunctional_dispatch.h
upsample bilinear2d aa compositeimplicitautograd dispatch.h
_upsample_bilinear2d_aa_cpu_dispatch.h
_upsample_bilinear2d_aa_cuda_dispatch.h
upsample bilinear2d aa meta.h
_upsample_bilinear2d_aa_meta_dispatch.h
upsample bilinear2d aa native.h
_upsample_bilinear2d_aa_ops.h
upsample nearest exact1d.h
_upsample_nearest_exact1d_backward.h
upsample nearest exact1d backward compositeexplicitautogradnonfunctional dispatch.h
_upsample_nearest_exact1d_backward_cpu_dispatch.h
upsample nearest exact1d backward cuda dispatch.h
_upsample_nearest_exact1d_backward_meta.h
upsample nearest exact1d backward meta dispatch.h
_upsample_nearest_exact1d_backward_native.h
upsample nearest exact1d backward ops.h
_upsample_nearest_exact1d_compositeexplicitautogradnonfunctional_dispatch.h
upsample nearest exact1d compositeimplicitautograd dispatch.h
_upsample_nearest_exact1d_cpu_dispatch.h
_upsample_nearest_exact1d_cuda_dispatch.h
upsample nearest exact1d meta.h
_upsample_nearest_exact1d_meta_dispatch.h
upsample nearest exactld native.h
_upsample_nearest_exact1d_ops.h
upsample nearest exact2d.h
_upsample_nearest_exact2d_backward.h
upsample nearest exact2d backward compositeexplicitautogradnonfunctional dispatch.h
_upsample_nearest_exact2d_backward_cpu_dispatch.h
upsample nearest exact2d backward cuda dispatch.h
_upsample_nearest_exact2d_backward_meta.h
upsample nearest exact2d backward meta dispatch.h
_upsample_nearest_exact2d_backward_native.h
upsample nearest exact2d backward ops.h
_upsample_nearest_exact2d_compositeexplicitautogradnonfunctional_dispatch.h
upsample nearest exact2d compositeimplicitautograd dispatch.h
_upsample_nearest_exact2d_cpu_dispatch.h
_upsample_nearest_exact2d_cuda_dispatch.h
upsample nearest exact2d meta.h
_upsample_nearest_exact2d_meta_dispatch.h
upsample nearest exact2d native.h
_upsample_nearest_exact2d_ops.h
upsample nearest exact3d.h
_upsample_nearest_exact3d_backward.h
upsample nearest exact3d backward compositeexplicitautogradnonfunctional dispatch.h
_upsample_nearest_exact3d_backward_cpu_dispatch.h
upsample nearest exact3d backward cuda dispatch.h
```

```
_upsample_nearest_exact3d_backward_meta.h
upsample nearest exact3d backward meta dispatch.h
_upsample_nearest_exact3d_backward_native.h
upsample nearest exact3d backward ops.h
_upsample_nearest_exact3d_compositeexplicitautogradnonfunctional_dispatch.h
upsample nearest exact3d compositeimplicitautograd dispatch.h
_upsample_nearest_exact3d_cpu_dispatch.h
upsample nearest exact3d cuda dispatch.h
upsample nearest exact3d meta.h
_upsample_nearest_exact3d_meta_dispatch.h
upsample nearest exact3d native.h
_upsample_nearest_exact3d_ops.h
use cudnn ctc loss.h
_use_cudnn_ctc_loss_cuda_dispatch.h
use cudnn ctc loss native.h
_use_cudnn_ctc_loss_ops.h
use cudnn rnn flatten weight.h
_use_cudnn_rnn_flatten_weight_compositeimplicitautograd_dispatch.h
use cudnn rnn flatten weight native.h
_use_cudnn_rnn_flatten_weight_ops.h
validate compressed sparse indices.h
_validate_compressed_sparse_indices_cpu_dispatch.h
validate compressed sparse indices cuda dispatch.h
_validate_compressed_sparse_indices_native.h
validate compressed sparse indices ops.h
validate sparse bsc tensor args.h
_validate_sparse_bsc_tensor_args_compositeimplicitautograd_dispatch.h
validate sparse bsc tensor args native.h
_validate_sparse_bsc_tensor_args_ops.h
validate sparse bsr tensor args.h
\_validate\_sparse\_bsr\_tensor\_args\_compositeimplicitautograd\_dispatch.h
validate sparse bsr tensor args native.h
_validate_sparse_bsr_tensor_args_ops.h
validate sparse compressed tensor args.h
_validate_sparse_compressed_tensor_args_compositeimplicitautograd_dispatch.h
validate sparse compressed tensor args native.h
_validate_sparse_compressed_tensor_args_ops.h
validate sparse coo tensor args.h
\_validate\_sparse\_coo\_tensor\_args\_compositeimplicitautograd\_dispatch.h
validate sparse coo tensor args native.h
_validate_sparse_coo_tensor_args_ops.h
_validate_sparse_csc_tensor_args.h
_validate_sparse_csc_tensor_args_compositeimplicitautograd_dispatch.h
_validate_sparse_csc_tensor_args_native.h
validate sparse csc tensor args ops.h
_validate_sparse_csr_tensor_args.h
_validate_sparse_csr_tensor_args_compositeimplicitautograd_dispatch.h
_validate_sparse_csr_tensor_args_native.h
validate sparse csr tensor args ops.h
values.h
values copy.h
```

```
_values_copy_compositeexplicitautogradnonfunctional_dispatch.h
_values_copy_compositeexplicitautograd_dispatch.h
_values_copy_native.h
values copy ops.h
_values_native.h
values ops.h
_version.h
version compositeimplicitautograd dispatch.h
_version_native.h
_version_ops.h
weight int4pack mm.h
_weight_int4pack_mm_cuda_dispatch.h
weight int4pack mm for cpu.h
_weight_int4pack_mm_for_cpu_cpu_dispatch.h
weight int4pack mm for cpu native.h
_weight_int4pack_mm_for_cpu_ops.h
_weight_int4pack_mm_native.h
_weight_int4pack_mm_ops.h
weight int8pack mm.h
_weight_int8pack_mm_cpu_dispatch.h
weight int8pack mm native.h
_weight_int8pack_mm_ops.h
weight norm.h
\_weight\_norm\_compositeimplicitautograd\_dispatch.h
weight norm differentiable backward.h
_weight_norm_differentiable_backward_compositeimplicitautograd_dispatch.h
_weight_norm_differentiable_backward_native.h
weight norm differentiable backward ops.h
_weight_norm_interface.h
weight norm interface backward.h
_weight_norm_interface_backward_compositeexplicitautograd_dispatch.h
weight norm interface backward cpu dispatch.h
_weight_norm_interface_backward_cuda_dispatch.h
weight norm interface backward native.h
_weight_norm_interface_backward_ops.h
weight norm interface compositeexplicitautograd dispatch.h
_weight_norm_interface_cpu_dispatch.h
weight norm interface cuda dispatch.h
_weight_norm_interface_native.h
weight norm interface ops.h
_weight_norm_native.h
_weight_norm_ops.h
_wrapped_linear_prepack.h
_wrapped_linear_prepack_compositeimplicitautograd_dispatch.h
wrapped linear prepack native.h
_wrapped_linear_prepack_ops.h
_wrapped_quantized_linear_prepacked.h
_wrapped_quantized_linear_prepacked_compositeimplicitautograd_dispatch.h
wrapped quantized linear prepacked native.h
_wrapped_quantized_linear_prepacked_ops.h
```

```
+---quantized
                                QTensorImpl.h
                        Quantizer.h
                        \---xpu
                            1
                                CachingHostAllocator.h
                                PinnedMemoryAllocator.h
                                XPUContext.h
                            XPUDevice.h
                                XPUEvent.h
                                XPUGeneratorImpl.h
                            \---detail
                                    XPUHooks.h
                    +---c10
                        +---core
                                alignment.h
                        Allocator.h
                                AutogradState.h
                                Backend.h
                                CachingDeviceAllocator.h
                        CompileTimeFunctionPointer.h
                                {\tt ConstantSymNodeImpl.h}
                                Contiguity.h
                                CopyBytes.h
                                CPUAllocator.h
                                DefaultDtype.h
ı
                                {\tt DefaultTensorOptions.h}
                                Device.h
                        1
                                DeviceArray.h
                                DeviceGuard.h
                                DeviceType.h
                        DispatchKey.h
                                DispatchKeySet.h
                                DynamicCast.h
                                Event.h
                                GeneratorImpl.h
                                GradMode.h
                                InferenceMode.h
                                Layout.h
                        MemoryFormat.h
                                OptionalRef.h
                                PyHandleCache.h
                                QEngine.h
                                QScheme.h
                        ı
                                RefcountedDeleter.h
                                SafePyObject.h
                    1
                       Scalar.h
                                ScalarType.h
                                ScalarTypeToTypeMeta.h
```

```
Storage.h
        StorageImpl.h
        Stream.h
StreamGuard.h
        SymbolicShapeMeta.h
        SymBool.h
        SymFloat.h
        SymInt.h
        SymIntArrayRef.h
        SymNodeImpl.h
        TensorImpl.h
1
        TensorOptions.h
        thread pool.h
        UndefinedTensorImpl.h
        WrapDimMinimal.h
    \---impl
            alloc_cpu.h
            COW.h
            COWDeleter.h
            DeviceGuardImplInterface.h
            FakeGuardImpl.h
            GPUTrace.h
            HermeticPyObjectTLS.h
            InlineDeviceGuard.h
            InlineEvent.h
            InlineStreamGuard.h
            LocalDispatchKeySet.h
            PyInterpreter.h
            PyObjectSlot.h
            PythonDispatcherTLS.h
            SizesAndStrides.h
            TorchDispatchModeTLS.h
            VirtualGuardImpl.h
+---cuda
        CUDAAlgorithm.h
        CUDAAllocatorConfig.h
        CUDACachingAllocator.h
        CUDADeviceAssertion.h
        CUDADeviceAssertionHost.h
CUDAException.h
        CUDAFunctions.h
        CUDAGraphsC10Utils.h
        CUDAGuard.h
        CUDAMacros.h
CUDAMathCompat.h
        CUDAMiscFunctions.h
CUDAStream.h
        driver_api.h
```

ı	ı	ı	ı	ı	\	impl
ı	ı	I	ı	ı	ı	CUDAGuardImpl.h
ı	ı	I	ı	ı	ı	CUDATest.h
ı	ı	I	ı	ı	ı	
ı	1	1	1	ı	+mac	eros
ı	1	1	1	ı	1	cmake_macros.h
ı	1	1	I	I	1	Export.h
ı	-	1	-	ı	1	Macros.h
ı	1	1	I	ı	1	
ı	-	1	I	ı	+uti	il
1	1	1	I	ı	I	AbortHandler.h
ī	1	1	1	I		accumulate.h
ī	1	1	1	I		AlignOf.h
ı		1	-	ı	1	ApproximateClock.h
ı		1	-	ı	1	Array.h
ı		1	-	ı	1	ArrayRef.h
ī	1	1	1	I		Backtrace.h
ī	1	1	1	I		BFloat16-inl.h
ı		1	-	ı	1	BFloat16-math.h
ı		1	-	ı	1	BFloat16.h
ı		1	-	ı	1	bits.h
1	1	1	-	I		Bitset.h
1	1	1	-	I		bit_cast.h
1		1	-	I	1	C++17.h
1	1	1	-	1	1	CallOnce.h
1	1	1	-	1		complex.h
1	-	1	-	1	1	complex_math.h
1	1	1	-	-		complex_utils.h
1	-	1	-	I	1	ConstexprCrc.h
1	1	1	-	-		copysign.h
1	1	1	-	-		DeadlockDetection.h
1	1	1	-	1	1	Deprecated.h
1	1	1	-	1	1	DimVector.h
1	1	1	-	1	1	DynamicCounter.h
-	1	1	-	-	1	env.h
-	1	1	-	-	1	error.h
- 1	-	I	-	-	1	Exception.h
I	-	1	I	I	1	ExclusivelyOwned.h
-	1	1	-	-	1	${\tt ExclusivelyOwnedTensorTraits.h}$
-		1	-	-	1	FbcodeMaps.h
-	1	1	-	-	1	Flags.h
-	-	1	-	- 1	1	flat_hash_map.h
- 1		1	-	I		Float8_e4m3fn-inl.h
- 1		1	-	I		Float8_e4m3fn.h
I	1	1	I	I	I	Float8_e4m3fnuz-inl.h
- 1	-	1	I	I	1	Float8_e4m3fnuz.h
I	-	- 1	I	I	I	Float8_e5m2-inl.h
- 1	-	1	- 1	I	1	Float8_e5m2.h
I	-	I	I	I	1	Float8_e5m2fnuz-inl.h
I	-	I	I	I	1	Float8_e5m2fnuz.h
I	I	I	I	I	I	Float8_fnuz_cvt.h

I	-			I		floating_point_utils.h
- 1	-	I	1	1		FunctionRef.h
- 1	-	I	1	1		Gauge.h
I	-	I	1	I		generic_math.h
- 1	-	I	1	1		Half-inl.h
- 1	-			I		Half.h
- 1	-	I		I		hash.h
- 1	-			I		IdWrapper.h
I	-	I	1	I		int128.h
I	-	I	1	I		intrusive_ptr.h
I	-	I	1	I		irange.h
I	-	I	1	I		Lazy.h
- 1	1	I		I		LeftRight.h
- 1	1	I		I		llvmMathExtras.h
-	1		1	I		Load.h
I	-	I	1	I		Logging.h
-	1	I	1	ı		logging_is_google_glog.h
- 1	1		1	ı		logging_is_not_google_glog.h
I	1	I	I	I		MathConstants.h
I	1	I	I	I		MaybeOwned.h
I	1	I	I	I		Metaprogramming.h
I	1	I	I	ı		NetworkFlow.h
I	1	I	I	ı		numa.h
I	1	I	I	ı		Optional.h
I	1	I	I	ı		OptionalArrayRef.h
I	1	I	I	ı		order_preserving_flat_hash_map.h
- 1	I	I	I	ı		overflows.h
I	1	I	I	ı		overloaded.h
I	1	I	I	ı		ParallelGuard.h
I	1	I	I	ı		python_stub.h
I	1	I	I	ı		qint32.h
- 1	1	I	I	ı		qint8.h
ı	I	I	ı	ı	1	quint2x4.h
ı	I	ı	ı	ı	I	quint4x2.h
1	1	1	ı	ı	1	quint8.h
1	1	ı	ı	ı	1	Registry.h
1	1	ı	ı	ı	1	safe_numerics.h
		· I	ı	i I	I	- ScopeExit.h
	·	· I	ı	i I	I	signal_handler.h
		· I	ı	i	1	SmallBuffer.h
	·	I	i I	· I	I	SmallVector.h
	·	I	ı	· I	I	sparse_bitset.h
	·	I	I		I	ssize.h
1	,	' 	1		1	static_tracepoint.h
1	,	' 	1		1	static tracepoint elfx86.h
1	,	' 	· 		1	strides.h
1	,	' 	· 	' I	1	StringUtil.h
1	' I	' 	· 		1	string utils.h
1	,	' 	· 	' I	1	string_view.h
1	,	' 	' 		1	strong_type.h
1	' 	' 	' 	' I	' 	Synchronized.h
	'					*

```
tempfile.h
            ThreadLocal.h
            ThreadLocalDebugInfo.h
            thread name.h
            Type.h
            TypeCast.h
            typeid.h
            TypeIndex.h
            TypeList.h
            TypeSafeSignMath.h
            TypeTraits.h
            Unicode.h
            UniqueVoidPtr.h
            Unroll.h
            WaitCounter.h
            {\tt WaitCounterDynamicBackend.h}
            win32-headers.h
    \---xpu
        XPUCachingAllocator.h
        XPUDeviceProp.h
            XPUException.h
        1
            XPUFunctions.h
            XPUMacros.h
            XPUStream.h
        \---impl
                XPUGuardImpl.h
+---caffe2
    \---serialize
            crc_alt.h
            file_adapter.h
            inline_container.h
            in_memory_adapter.h
            istream adapter.h
            read_adapter_interface.h
            versions.h
+---kineto
        AbstractConfig.h
        ActivityProfilerInterface.h
        ActivityTraceInterface.h
        ActivityType.h
        ClientInterface.h
        Config.h
        GenericTraceActivity.h
        IActivityProfiler.h
        ILoggerObserver.h
        ITraceActivity.h
        libkineto.h
```

```
LoggingAPI.h
                           output_base.h
                           ThreadUtil.h
                            time_since_epoch.h
                           TraceSpan.h
                   +---pybind11
                           attr.h
                           buffer_info.h
                           cast.h
                           chrono.h
                   1
                           common.h
                           complex.h
                           eigen.h
                           embed.h
                           eval.h
                            functional.h
ı
                           gil.h
                           gil_safe_call_once.h
                   iostream.h
                           numpy.h
                           operators.h
                           options.h
                           pybind11.h
                           pytypes.h
                           stl.h
                           stl_bind.h
                           type_caster_pyobject_ptr.h
ī
                           typing.h
                   1
                        +---detail
                                class.h
                                common.h
                                cpp_conduit.h
                                descr.h
                                exception translation.h
                                init.h
                                internals.h
                                typeid.h
                                type caster base.h
                                value_and_holder.h
                        \---eigen
                                common.h
                                matrix.h
                                tensor.h
I
                   \---torch
           custom_class.h
                           custom_class_detail.h
                           extension.h
```

```
library.h
                script.h
            \---csrc
                    copy_utils.h
                    CudaIPCTypes.h
                    DataLoader.h
                    Device.h
                    DeviceAccelerator.h
                    Dtype.h
                    DynamicTypes.h
                    Event.h
                    Exceptions.h
                    Export.h
                    Generator.h
                    itt_wrapper.h
                1
                    Layout.h
                    MemoryFormat.h
                    Module.h
                    PyInterpreter.h
                    python_dimname.h
                    python_headers.h
                    QScheme.h
                    serialization.h
                    Size.h
                    Storage.h
                    StorageMethods.h
                    StorageSharing.h
                    Stream.h
                    THConcat.h
                    THP.h
                    TypeInfo.h
                    Types.h
                    utils.h
                +---api
                    \---include
                        \---torch
                                all.h
                                arg.h
                                autograd.h
                                cuda.h
                                data.h
                                enum.h
                                expanding array.h
                                fft.h
                                imethod.h
                                jit.h
                                mps.h
                                nested.h
nn.h
```

```
optim.h
                                            ordered_dict.h
                                            python.h
                                            serialize.h
                                            sparse.h
                                             special.h
                                            torch.h
                                            types.h
                                            utils.h
                                            version.h
                                            xpu.h
                                        +---data
                                                dataloader.h
                                                dataloader options.h
                                                 datasets.h
                                                 example.h
                                                 iterator.h
                                                 samplers.h
                                                 transforms.h
                                                 worker_exception.h
                                             +---dataloader
                                                    base.h
                                                     stateful.h
                                                     stateless.h
                                             +---datasets
                                                    base.h
                                                     chunk.h
                                                    map.h
                                                    mnist.h
                                                     shared.h
                                                     stateful.h
                                                     tensor.h
                                            +---detail
                                                     data_shuttle.h
                                                     queue.h
                                                     sequencers.h
                                             +---samplers
                                                    base.h
                                                     custom_batch_request.h
                                                     distributed.h
                                                     random.h
I
                                                     sequential.h
                                                     serialize.h
                                                     stream.h
                                            \---transforms
```

```
base.h
                                                     collate.h
                                                     lambda.h
                                                     stack.h
                                                     tensor.h
                                         +---detail
                                                 static.h
                                                 TensorDataContainer.h
                                         +---nn
                                                 cloneable.h
                                                 functional.h
                                                 init.h
                                                 module.h
                                                 modules.h
                                                 options.h
                                                 pimpl-inl.h
                                                 pimpl.h
                                                 utils.h
                                             +---functional
                                                     activation.h
                                                     batchnorm.h
                                                     conv.h
                                                     distance.h
                                                     dropout.h
                                                     embedding.h
                                                     fold.h
                                                     instancenorm.h
                                                     linear.h
                                                     loss.h
                                                     normalization.h
                                                     padding.h
                                                     pixelshuffle.h
                                                     pooling.h
                                                     upsampling.h
                                                     vision.h
                                             +---modules
                                                     activation.h
                                                     adaptive.h
                                                     batchnorm.h
                                                     common.h
                                                     conv.h
                                                     distance.h
I
                                                     dropout.h
                                                     embedding.h
                                                     fold.h
                                                     instancenorm.h
                                                     linear.h
```

```
loss.h
                                                     normalization.h
                                                     padding.h
                                                     pixelshuffle.h
                                                     pooling.h
                                                     rnn.h
                                                     transformer.h
                                                     transformercoder.h
                                                     transformerlayer.h
                                                     upsampling.h
                                                     utils.h
                                                     _functions.h
                                                 \---container
                                                         any.h
                                                         any_module_holder.h
                                                         any_value.h
ı
                                                         functional.h
                                                         moduledict.h
                                                         modulelist.h
                                                         named any.h
                                                         parameterdict.h
                                                         parameterlist.h
                                                         sequential.h
                                             +---options
                                                     activation.h
                                                     adaptive.h
                                                     batchnorm.h
                                                     conv.h
                                                     distance.h
                                                     dropout.h
                                                     embedding.h
                                                     fold.h
                                                     instancenorm.h
                                                     linear.h
                                                     loss.h
                                                     normalization.h
                                                     padding.h
                                                     pixelshuffle.h
                                                     pooling.h
                                                     rnn.h
                                                     transformer.h
                                                     transformercoder.h
                                                     transformerlayer.h
                                                     upsampling.h
Ī
                                                     vision.h
                                             +---parallel
                                                     data_parallel.h
```

```
\---utils
                        clip_grad.h
                        convert_parameters.h
                        rnn.h
            +---optim
                    adagrad.h
                    adam.h
                    adamw.h
                    lbfgs.h
                    optimizer.h
                    rmsprop.h
                    serialize.h
                    sgd.h
                \---schedulers
                        lr_scheduler.h
                        reduce_on_plateau_scheduler.h
                        step_lr.h
            \---serialize
                    archive.h
                    input-archive.h
                    output-archive.h
                    tensor.h
+---autograd
        anomaly_mode.h
autograd.h
        autograd not implemented fallback.h
        cpp_hook.h
1
        custom_function.h
        edge.h
        engine.h
        forward_grad.h
        function.h
        FunctionsManual.h
        function hook.h
        grad_mode.h
        graph task.h
        InferenceMode.h
        input_buffer.h
        input_metadata.h
        jit_decomp_interface.h
        profiler.h
        profiler_kineto.h
        profiler_legacy.h
        profiler_python.h
        python_anomaly_mode.h
        python_autograd.h
        python_cpp_function.h
```

```
python_engine.h
        python_enum_tag.h
        python_fft_functions.h
        python function.h
        python_hook.h
        python_legacy_variable.h
        python_linalg_functions.h
        python_nested_functions.h
        python_nn_functions.h
        python_saved_variable_hooks.h
        python_sparse_functions.h
        python_special_functions.h
        python_torch_functions.h
1
        python_variable.h
        python variable indexing.h
        record_function_ops.h
        saved_variable.h
        saved_variable_hooks.h
        symbolic.h
        variable.h
        VariableTypeUtils.h
        variable_info.h
    +---functions
            accumulate_grad.h
            basic_ops.h
            comm.h
            pybind.h
            tensor.h
            utils.h
    +---generated
            Functions.h
            python_functions.h
            python_return_types.h
            VariableType.h
            variable_factories.h
            ViewFuncs.h
    \---utils
            error_messages.h
            grad_layout_contract.h
            lambda_post_hook.h
            python_arg_parsing.h
            warnings.h
            wrap_outputs.h
1
+---cuda
        comm.h
       CUDAPluggableAllocator.h
        device set.h
```

```
Event.h
        GdsFile.h
        memory_snapshot.h
        Module.h
        nccl.h
        python comm.h
        python_nccl.h
        Stream.h
        THCP.h
1
+---distributed
    +---autograd
        +---context
                container.h
                context.h
        +---functions
                recvrpc_backward.h
                sendrpc backward.h
        \---rpc messages
                autograd_metadata.h
                cleanup autograd context req.h
                cleanup_autograd_context_resp.h
                propagate_gradients_req.h
                propagate_gradients_resp.h
                rpc_with_autograd.h
                rpc_with_profiling_req.h
                rpc_with_profiling_resp.h
                rref backward req.h
                rref_backward_resp.h
    +---c10d
            Backend.hpp
            Backoff.hpp
            c10d.h
            comm.hpp
            CUDASymmetricMemory-inl.h
            {\tt CUDASymmetricMemory.hpp}
            debug.h
            default_comm_hooks.hpp
            DMAConnectivity.hpp
            error.h
            exception.h
            FakeProcessGroup.hpp
            FileStore.hpp
            FlightRecorder.hpp
            Functional.hpp
            GlooDeviceFactory.hpp
            GroupRegistry.hpp
            HashStore.hpp
```

l	I	l	I	I	I	intra_node_comm.hpp
l	I	l	I	ı	ı	logger.hpp
l	l	l	I	I		logging.h
l	1	l	I	ı	ı	NanCheck.hpp
l	I	I	I	i I	I	NCCLUtils.hpp
		I	I	I	I	ParamCommsUtils.hpp
l		I	' I	I	1	PrefixStore.hpp
' 		' 	! !	'	1	ProcessGroup.hpp
			' I	1	1	ProcessGroupGloo.hpp
				1		
	1	1		1		ProcessGroupMPI.hpp
	1	1	l			ProcessGroupNCCL.hpp
						ProcessGroupUCC.hpp
						ProcessGroupWrapper.hpp
l	l				I	PyProcessGroup.hpp
l			l			python_comm_hook.h
l						RankLocal.hpp
l	I		l		I	reducer.hpp
I			I			reducer_timer.hpp
l			I	1		sequence_num.hpp
I	l		I			socket.h
I			I	1		socket_fmt.h
I			I	I		Store.hpp
l			I	I		SymmetricMemory.hpp
I			I	I		TCPStore.hpp
l			I	I		TCPStoreBackend.hpp
l	l		I	1		TraceUtils.h
l	I		I	I	I	Types.hpp
l	I		l	I	I	UCCTracing.hpp
I		l	I	I		UCCUtils.hpp
I		l	I	I		UnixSockUtils.hpp
I		l	I	I		Utils.hpp
l	I	I	I	ı	I	WinSockUtils.hpp
ı	I	I	I	I	· 	Work.hpp
I		' 	' I	I	1	
' I		' 	! I	' !	\rpc	
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	1	1	  -	1		-
	1	1	1	1		python_call.h
	1	1		I		python_functions.h
						python_remote_call.h
l	l					python_resp.h
l						python_rpc_handler.h
l			l			py_rref.h
l		l	I	I		request_callback.h
I	l		I	I		request_callback_impl.h
I	I	l	I	I		request_callback_no_python.h
I	l		I	1		rpc.h
I	I		I	I		rpc_agent.h
I	I	I	I	I		rpc_command_base.h
I	I	l	I	I		rref_context.h
I	l	l	I	I		rref_impl.h

```
rref_proto.h
            script_call.h
            script_remote_call.h
            script_resp.h
            tensorpipe_agent.h
            tensorpipe utils.h
            torchscript_functions.h
            types.h
            unpickled_python_call.h
            unpickled_python_remote_call.h
            utils.h
+---dynamo
        cache_entry.h
        compiled autograd.h
        cpp_shim.h
        cpython_defs.h
        cpython_includes.h
debug macros.h
       eval_frame.h
extra state.h
        framelocals_mapping.h
        guards.h
        init.h
        python compiled autograd.h
        utils.h
+---inductor
        inductor_ops.h
    +---aoti_package
            model_package_loader.h
            pybind.h
    +---aoti_runner
model_container_runner.h
            model_container_runner_cpu.h
            model_container_runner_cuda.h
            model_container_runner_xpu.h
            pybind.h
    +---aoti_runtime
arrayref_tensor.h
            device_utils.h
            interface.h
            model.h
            model_container.h
            scalar_to_tensor.h
            sycl_runtime_wrappers.h
            thread_local.h
            utils.h
```

```
utils_cuda.h
            utils_xpu.h
    \---aoti_torch
            mkldnn_tensor.h
            oss_proxy_executor.h
            proxy_executor.h
            tensor converter.h
            utils.h
                shim.h
                shim mkldnn.h
                shim_xpu.h
        \---generated
                c_shim_cpu.h
                c_shim_cuda.h
                c_shim_xpu.h
+---jit
       jit_log.h
        jit_opt_limit.h
        resource_guard.h
    +---api
            compilation_unit.h
            function_impl.h
            method.h
            module.h
            object.h
    +---backends
            backend.h
            backend_debug_handler.h
            backend_debug_info.h
            backend_detail.h
            backend_exception.h
            backend_init.h
            backend interface.h
            backend_preprocess.h
            backend_resolver.h
    +---codegen
        \---cuda
                interface.h
    +---frontend
            builtin_functions.h
            canonicalize_modified_loop.h
            concrete_module_type.h
```

	1	1		1	I	convert_to_ssa.h
1	1	1	I	1		edit_distance.h
-	1	1	1	1		error_report.h
I	1	1	1	1		exit_transforms.h
I	1	1	1	1		function_schema_parser.h
-	1	1	1	1	1	inline_loop_condition.h
1	1	1	1	1		ir_emitter.h
1	1	1	1	1		lexer.h
1	1	1	1	1		mini_environment.h
-	1	1	1	1	1	name_mangler.h
-	1	1	1	1	1	parser.h
1	1	1	1	1		parser_constants.h
1	1	1	1	1		parse_string_literal.h
1	I	1	T	1		resolver.h
1	I	1	I	1	1	schema_matching.h
I	I	1	T	1	1	schema_type_parser.h
ı	I	1	I	1		script_type_parser.h
ı	ı	ı	I	1	I	source_range.h
ı	ı	1	ı	1	1	source ref.h
ı	Ī	i	Ī	ĺ	ı	- strtod.h
i	i	i	i	·	i I	sugared_value.h
·	i	·	i	·	i I	tracer.h
·	i	i I		i	' 	tree.h
'		· 		' 	1	tree_views.h
'	'				1	versioned_symbols.h
'				' 	1	verbronea_bynborb.n
'			1	' 	+ir	
'	,		1			alias_analysis.h
- 1						allas analysis.n
1	·				1	
1	İ	I	i I	I	I	attributes.h
	·	1		I		attributes.h constants.h
			 	1		attributes.h constants.h graph_node_list.h
		 	1 1 1 1	1 1		attributes.h constants.h graph_node_list.h graph_utils.h
			 			attributes.h constants.h graph_node_list.h graph_utils.h ir.h
						attributes.h constants.h graph_node_list.h graph_utils.h ir.h irparser.h
						attributes.h constants.h graph_node_list.h graph_utils.h ir.h irparser.h ir_views.h
						attributes.h  constants.h  graph_node_list.h  graph_utils.h  ir.h  irparser.h  ir_views.h  named_value.h
						attributes.h constants.h graph_node_list.h graph_utils.h ir.h irparser.h ir_views.h named_value.h node_hashing.h
						attributes.h  constants.h  graph_node_list.h  graph_utils.h  ir.h  irparser.h  ir_views.h  named_value.h  node_hashing.h  scope.h
						attributes.h  constants.h  graph_node_list.h  graph_utils.h  ir.h  irparser.h  ir_views.h  named_value.h  node_hashing.h  scope.h  subgraph_matcher.h
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						attributes.h constants.h graph_node_list.h graph_utils.h ir.h ir.h irparser.h ir_views.h named_value.h node_hashing.h scope.h subgraph_matcher.h type_hashing.h ile code.h debug_info.h file_format.h
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						attributes.h constants.h graph_node_list.h graph_utils.h ir.h ir.h irparser.h ir_views.h named_value.h node_hashing.h scope.h subgraph_matcher.h type_hashing.h ile code.h debug_info.h file_format.h flatbuffer_loader.h frame.h
						attributes.h constants.h graph_node_list.h graph_utils.h ir.h irparser.h ir_views.h named_value.h node_hashing.h scope.h subgraph_matcher.h type_hashing.h ile code.h debug_info.h file_format.h flatbuffer_loader.h frame.h function.h
						attributes.h constants.h graph_node_list.h graph_utils.h ir.h ir.h irparser.h ir_views.h named_value.h node_hashing.h scope.h subgraph_matcher.h type_hashing.h ile code.h debug_info.h file_format.h flatbuffer_loader.h frame.h function.h import.h

```
interpreter.h
        method.h
       module.h
        observer.h
       parse_bytecode.h
        parse operators.h
       prim_ops_registery.h
        profiler edge.h
        promoted_prim_ops.h
        quantization.h
        register_ops_common_utils.h
        type_parser.h
        upgrader mobile.h
+---passes
        add_if_then_else.h
        annotate warns.h
        autocast.h
        bailout graph.h
        batch_mm.h
        canonicalize.h
        canonicalize_graph_fuser_ops.h
        check strict fusion.h
        clear_profiling.h
        clear undefinedness.h
        common subexpression elimination.h
        concat_opt.h
        constant pooling.h
        constant_propagation.h
        create autodiff subgraphs.h
        create_functional_graphs.h
        dead_code_elimination.h
        decompose_ops.h
        device_type_analysis.h
        dtype_analysis.h
        eliminate no ops.h
        erase_number_types.h
        fixup trace scope blocks.h
        fold_conv_bn.h
        fold linear bn.h
        freeze_module.h
        frozen_concat_linear.h
        frozen_conv_add_relu_fusion.h
        frozen_conv_folding.h
        frozen graph optimizations.h
        frozen_linear_folding.h
        frozen_linear_transpose.h
        frozen_ops_to_mkldnn.h
        fuse_linear.h
        fuse_relu.h
        graph fuser.h
```

```
graph_rewrite_helper.h
guard elimination.h
hoist_conv_packed_params.h
inliner.h
inline_autodiff_subgraphs.h
inline forked closures.h
inline_fork_wait.h
inplace check.h
insert_guards.h
integer_value_refinement.h
lift closures.h
liveness.h
loop unrolling.h
lower_grad_of.h
lower graph.h
lower_tuples.h
metal rewrite.h
mkldnn_rewrite.h
mobile_optimizer_type.h
normalize_ops.h
onednn graph fuser.h
onnx.h
pass manager.h
peephole.h
peephole alias sensitive.h
peephole_dict_idioms.h
peephole_list_idioms.h
peephole_non_tensor.h
prepack_folding.h
refine tuple types.h
remove_dropout.h
remove exceptions.h
remove_expands.h
remove_inplace_ops.h
remove_mutation.h
remove redundant profiles.h
replacement_of_old_operators.h
requires grad analysis.h
restore_mutation.h
shape analysis.h
specialize_autogradzero.h
subgraph_rewrite.h
symbolic_shape_analysis.h
symbolic_shape_cache.h
symbolic_shape_runtime_fusion.h
tensorexpr_fuser.h
update_differentiable_graph_requires_grad.h
value_refinement_utils.h
variadic ops.h
vulkan_rewrite.h
xnnpack rewrite.h
```

```
+---quantization
                dedup_module_uses.h
                finalize.h
                fusion_passes.h
                helper.h
                insert_observers.h
                insert quant dequant.h
                quantization_patterns.h
                quantization_type.h
                register packed params.h
        \---utils
                {\tt check\_alias\_annotation.h}
                memory dag.h
                optimization_utils.h
                op_registry.h
                subgraph_utils.h
    +---python
            init.h
module_python.h
            pybind.h
            pybind_utils.h
            python arg flatten.h
            python_custom_class.h
            python_dict.h
            python ir.h
            python_ivalue.h
            python list.h
            python_sugared_value.h
            python_tracer.h
            python_tree_views.h
            script_init.h
            update_graph_executor_opt.h
            utf8 decoding ignore.h
    +---runtime
            argument_spec.h
            autodiff.h
            calculate_necessary_args.h
            custom_operator.h
            decomposition_registry.h
            decomposition_registry_util.h
            exception message.h
            graph_executor.h
            graph_executor_impl.h
            graph_iterator.h
            instruction.h
            interpreter.h
            jit exception.h
```

```
jit_trace.h
            logging.h
            operator.h
            operator_options.h
            print_handler.h
            profiling graph executor impl.h
            profiling_record.h
            register_ops_utils.h
            script profile.h
            serialized_shape_function_registry.h
            shape_function_registry.h
            simple_graph_executor_impl.h
            slice indices adjust.h
            symbolic_script.h
            symbolic shape registry.h
            symbolic_shape_registry_util.h
            vararg functions.h
            variable_tensor_list.h
    +---serialization
callstack debug info serialization.h
            export.h
            export bytecode.h
            flatbuffer_serializer.h
            flatbuffer_serializer_jit.h
            import.h
            import_export_constants.h
            import export functions.h
            import_export_helpers.h
            import read.h
            import_source.h
            mobile_bytecode_generated.h
            onnx.h
            pickle.h
            pickler.h
            python print.h
            source_range_serialization.h
            source range serialization impl.h
            storage_context.h
            type name uniquer.h
            unpickler.h
    +---tensorexpr
            analysis.h
            block codegen.h
            bounds_inference.h
            bounds overlap.h
            codegen.h
            cpp codegen.h
            cpp_intrinsics.h
            cuda codegen.h
```

```
cuda_random.h
                                         eval.h
                                         exceptions.h
1
                                         expr.h
                                         external_functions.h
                                         external functions core.h
                                         external_functions_registry.h
                                         fwd_decls.h
                                         graph_opt.h
1
                                         half_support.h
                                         hash_provider.h
                                         intrinsic_symbols.h
                                         ir.h
ī
                                         ir_cloner.h
                                         ir mutator.h
                                         ir_printer.h
                                         ir_simplifier.h
ı
                                         ir_verifier.h
                                         ir_visitor.h
                                         kernel.h
                                         llvm codegen.h
                                         llvm_jit.h
I
                                         loopnest.h
                                         {\tt loopnest\_randomization.h}
                                         lowerings.h
                                         mem_dependency_checker.h
                                         reduction.h
                                         registerizer.h
ī
                                         stmt.h
                                         tensor.h
                                         tensorexpr_init.h
                                         types.h
                                         unique_name_manager.h
                                         var substitutor.h
                                     \---operators
                                             conv2d.h
                                             matmul.h
                                             misc.h
                                             norm.h
                                             operators.h
                                             pointwise.h
                                             quantization.h
                                             reduction.h
                                             softmax.h
ı
                             1
                                 \---testing
                                         file_check.h
            hooks_for_testing.h
            -
            +---lazy
```

```
+---backend
            backend_data.h
           backend_device.h
            backend interface.h
            lowering_context.h
    +---core
            cache.h
            config.h
            debug_util.h
            dynamic ir.h
            hash.h
            helpers.h
            ir.h
            ir builder.h
            ir_dump_util.h
            ir_metadata.h
            ir_util.h
            lazy_graph_executor.h
            metrics.h
            multi_wait.h
            permutation_util.h
            shape.h
            shape_inference.h
            tensor.h
            tensor_impl.h
            tensor_util.h
            thread_pool.h
            trie.h
            unique.h
            util.h
        +---internal_ops
                ltc_ops.h
                arithmetic_ir_ops.h
                utils.h
    +---python
            python_util.h
\---ts_backend
            config.h
            dynamic_ir.h
            ir_builder.h
1
            tensor_aten_ops.h
            ts_autograd_functions.h
            ts_backend_impl.h
            ts_eager_fallback.h
            ts_lowering_context.h
```

```
ts_node.h
            ts_node_lowering.h
+---onnx
        back_compat.h
        init.h
        onnx.h
+---profiler
        api.h
        collection.h
        combined_traceback.h
        containers.h
        data_flow.h
        events.h
        kineto_client_interface.h
        kineto_shim.h
        perf-inl.h
        perf.h
        util.h
    +---orchestration
            observer.h
            python_tracer.h
            vulkan.h
    +---python
            combined traceback.h
            init.h
            pybind.h
    +---standalone
            execution_trace_observer.h
            itt_observer.h
            nvtx_observer.h
            privateusel_observer.h
    +---stubs
            base.h
    \---unwind
            action.h
            communicate.h
            debug_info.h
            dwarf enums.h
            dwarf_symbolize_enums.h
            eh_frame_hdr.h
            fast_symbolizer.h
            fde.h
            lexer.h
            line number program.h
```

```
mem_file.h
            range_table.h
            sections.h
            unwind.h
            unwinder.h
            unwind error.h
+---tensor
1
       python_tensor.h
+---utils
       byte_order.h
        cpp stacktraces.h
1
        cuda_enabled.h
        device lazy init.h
       disable_torch_function.h
1
        generated_serialization_types.h
        init.h
invalid arguments.h
        nested.h
numpy_stub.h
        object_ptr.h
        out_types.h
pybind.h
        pycfunction_helpers.h
1
       pyobject_preservation.h
        pythoncapi_compat.h
       python_arg_parser.h
1
        python_compat.h
python dispatch.h
        python_numbers.h
1
       python_raii.h
        python_scalars.h
python_strings.h
       python_stub.h
python_symnode.h
       python_torch_function_mode.h
python_tuples.h
        schema_info.h
        six.h
        structseq.h
        tensor_apply.h
1
        tensor_dtypes.h
        tensor_flatten.h
        tensor layouts.h
1
        tensor_list.h
1
        tensor_memoryformats.h
tensor_new.h
        tensor_numpy.h
        tensor_qschemes.h
        tensor types.h
```

```
throughput_benchmark-inl.h
                                throughput_benchmark.h
                                torch_dispatch_mode.h
                                variadic.h
                                verbose.h
                         \---xpu
                                Event.h
                                Module.h
                                Stream.h
              +---jit
                     annotations.py
                     frontend.py
                     generate bytecode.py
                     quantized.py
                     supported_ops.py
                     unsupported_tensor_ops.py
                     _async.py
                     _await.py
                     builtins.py
                     _check.py
                     _dataclass_impls.py
                     _decompositions.py
                     decomposition utils.py
                     _freeze.py
                     _fuser.py
                     _ir_utils.py
                     _logging.py
                     monkeytype config.py
                     _pickle.py
                     _recursive.py
                     _script.py
                     _script.pyi
                     _serialization.py
                     _shape_functions.py
                     _state.py
                     trace.py
                     \_init\_.py
                 +---mobile
                    | __init__.py
                    \---__pycache__
                            __init__.cpython-311.pyc
Ī
                 +---_passes
                 | | _property_propagation.py
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```
_property_propagation.cpython-311.pyc
                init .cpython-311.pyc
   \---_pycache_
           annotations.cpython-311.pyc
            frontend.cpython-311.pyc
           generate_bytecode.cpython-311.pyc
           quantized.cpython-311.pyc
           supported_ops.cpython-311.pyc
           unsupported_tensor_ops.cpython-311.pyc
           _async.cpython-311.pyc
            _await.cpython-311.pyc
           builtins.cpython-311.pyc
           _check.cpython-311.pyc
           dataclass impls.cpython-311.pyc
           _decompositions.cpython-311.pyc
           _decomposition_utils.cpython-311.pyc
           _freeze.cpython-311.pyc
           _fuser.cpython-311.pyc
           _ir_utils.cpython-311.pyc
           logging.cpython-311.pyc
           _monkeytype_config.cpython-311.pyc
           pickle.cpython-311.pyc
           _recursive.cpython-311.pyc
           script.cpython-311.pyc
           _serialization.cpython-311.pyc
           _shape_functions.cpython-311.pyc
           _state.cpython-311.pyc
           _trace.cpython-311.pyc
           init .cpython-311.pyc
+---lib
       asmjit.dll
        asmjit.lib
       c10.dll
        c10.lib
        cpuinfo.lib
        dnnl.lib
        fbgemm.dll
        fbgemm.lib
        fmt.lib
        kineto.lib
        libiomp5md.dll
        libiompstubs5md.dll
        libprotobuf-lite.lib
        libprotobuf.lib
        libprotoc.lib
       microkernels-prod.lib
       pthreadpool.lib
        shm.dll
        shm.lib
```

```
sleef.lib
       torch.dll
                   torch.lib
                   torch cpu.dll
                   torch_cpu.lib
                   torch_global_deps.dll
                   torch_python.dll
                   torch_python.lib
                   uv.dll
                   XNNPACK.lib
                   C.lib
         | +---linalg
         - 1
            | \---__pycache__
                   __init__.cpython-311.pyc
Ī
            +---masked
         | | _ops.py
              | __init__.py
              +---maskedtensor
              | | binary.py
                      core.py
              | | creation.py
                 | passthrough.py
               | | reductions.py
              | | unary.py
                     _ops_refs.py
              | \---__pycache__
                         binary.cpython-311.pyc
                         core.cpython-311.pyc
                         creation.cpython-311.pyc
                         passthrough.cpython-311.pyc
                         reductions.cpython-311.pyc
                         unary.cpython-311.pyc
                         _ops_refs.cpython-311.pyc
                         __init__.cpython-311.pyc
               - 1
               \---_pycache__
                      _docs.cpython-311.pyc
                      _ops.cpython-311.pyc
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         __init__.cpython-311.pyc
         | +---monitor
         1 1 1
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__init__.cpython-311.pyc
| +---mps
        | | event.py
          | | profiler.py
                 __init__.py
             \---__pycache__
                  event.cpython-311.pyc
                   profiler.cpython-311.pyc
                   __init__.cpython-311.pyc
        | +---mtia
        | | memory.py
        | | _utils.py
             | __init__.py
Ī
             \---_pycache__
                  memory.cpython-311.pyc
                   utils.cpython-311.pyc
                   __init__.cpython-311.pyc
        | +---multiprocessing
        | | pool.py
             | queue.py
             | reductions.py
Ī
             | spawn.py
                 _atfork.py
             | __init__.py
             \---_pycache__
        1 1
                  pool.cpython-311.pyc
                   queue.cpython-311.pyc
                   reductions.cpython-311.pyc
                   spawn.cpython-311.pyc
                   _atfork.cpython-311.pyc
                    __init__.cpython-311.pyc
        | +---nested
        Τ
             | | +--- internal
          | | nested_int.py
             | | nested tensor.py
        Ī
             | | sdpa.py
        nested int.cpython-311.pyc
```

```
1
 nested_tensor.cpython-311.pyc
                  ops.cpython-311.pyc
                  sdpa.cpython-311.pyc
                   __init__.cpython-311.pyc
1 1
       1 1 1
        | \---__pycache__
               __init__.cpython-311.pyc
       | +---nn
       | | common_types.py
       | functional.py
       | | functional.pyi
       | | grad.py
           | init.py
       | | parameter.py
I
           | parameter.pyi
       | | _reduction.py
           | __init__.py
1
           | +---attention
1
       | | flex attention.py
       | | +---experimental
           | | _paged_attention.py
        _paged_attention.cpython-311.pyc
           1 1
                     __init__.cpython-311.pyc
           bias.cpython-311.pyc
                  flex_attention.cpython-311.pyc
                  utils.cpython-311.pyc
                   __init__.cpython-311.pyc
1
       | +---backends
Τ
        | | thnn.py
       | \---_pycache__
                 thnn.cpython-311.pyc
I
                  __init__.cpython-311.pyc
      | +---intrinsic
```

```
fused.cpython-311.pyc
              __init__.cpython-311.pyc
       | +---qat
       | +---modules
       | | | conv fused.py
       | | | linear_fused.py
         | | | linear relu.py
       Ī
       conv_fused.cpython-311.pyc
               linear_fused.cpython-311.pyc
               linear relu.cpython-311.pyc
                __init__.cpython-311.pyc
       __init__.cpython-311.pyc
    | | +---quantized
       | | +---dynamic
       | | | linear_relu.py
        linear relu.cpython-311.pyc
                 __init__.cpython-311.pyc
       __init__.cpython-311.pyc
       | +---modules
        | | bn_relu.py
       | | | conv_relu.py
       | | | linear_relu.py
       bn relu.cpython-311.pyc
```

```
conv_relu.cpython-311.pyc
                    linear relu.cpython-311.pyc
                    __init__.cpython-311.pyc
  | \---_pycache_
                init .cpython-311.pyc
   \---__pycache__
            __init__.cpython-311.pyc
+---modules
       activation.py
       adaptive.py
       batchnorm.py
       channelshuffle.py
       container.py
       conv.py
       distance.py
       dropout.py
       flatten.py
        fold.py
       instancenorm.py
       lazy.py
       linear.py
       loss.py
       module.py
       normalization.py
       padding.py
       pixelshuffle.py
       pooling.py
1
    1
       rnn.py
       sparse.py
       transformer.py
       upsampling.py
       utils.py
       functions.py
        __init__.py
   \---__pycache__
            activation.cpython-311.pyc
            adaptive.cpython-311.pyc
            batchnorm.cpython-311.pyc
            channelshuffle.cpython-311.pyc
            container.cpython-311.pyc
            conv.cpython-311.pyc
            distance.cpython-311.pyc
            dropout.cpython-311.pyc
            flatten.cpython-311.pyc
            fold.cpython-311.pyc
            instancenorm.cpython-311.pyc
            lazy.cpython-311.pyc
```

```
linear.cpython-311.pyc
           loss.cpython-311.pyc
           module.cpython-311.pyc
           normalization.cpython-311.pyc
           padding.cpython-311.pyc
           pixelshuffle.cpython-311.pyc
           pooling.cpython-311.pyc
           rnn.cpython-311.pyc
           sparse.cpython-311.pyc
           transformer.cpython-311.pyc
           upsampling.cpython-311.pyc
           utils.cpython-311.pyc
           functions.cpython-311.pyc
           __init__.cpython-311.pyc
+---parallel
1 1
       comm.py
       data_parallel.py
       distributed.py
       parallel_apply.py
       replicate.py
       scatter_gather.py
   _functions.py
       __init__.py
   \---__pycache__
           comm.cpython-311.pyc
           data_parallel.cpython-311.pyc
           distributed.cpython-311.pyc
           parallel apply.cpython-311.pyc
           replicate.cpython-311.pyc
           scatter_gather.cpython-311.pyc
           _functions.cpython-311.pyc
           __init__.cpython-311.pyc
+---qat
+---dynamic
   | | init .py
   | |
      +---modules
   | | | linear.py
      __init__.py
   linear.cpython-311.pyc
                  __init__.cpython-311.pyc
__init__.cpython-311.pyc
```

```
| | embedding_ops.py
1
     1 1
             conv.cpython-311.pyc
             embedding_ops.cpython-311.pyc
              linear.cpython-311.pyc
1
       1 1
              __init__.cpython-311.pyc
1
    | \---_pycache__
            __init__.cpython-311.pyc
1
| | +---quantizable
I
    1
    | | | activation.py
    activation.cpython-311.pyc
              rnn.cpython-311.pyc
              __init__.cpython-311.pyc
1
    __init__.cpython-311.pyc
    | +---quantized
    | | | functional.py
1
    | | +---dynamic
    1 1 1
1
       | +---modules
       | | | conv.py
Τ
         | | | linear.py
       Τ
       1
       I
       conv.cpython-311.pyc
               linear.cpython-311.pyc
    rnn.cpython-311.pyc
1
               __init__.cpython-311.pyc
    1 1
```

```
| \---__pycache__
                                __init__.cpython-311.pyc
                    +---modules
                | | activation.py
                            batchnorm.py
                            conv.py
                            dropout.py
                            embedding_ops.py
                            functional_modules.py
                   - 1
                        - [
                            linear.py
                           normalization.py
                           rnn.py
                            utils.py
                            init .py
                   \---_pycache_
                               activation.cpython-311.pyc
                               batchnorm.cpython-311.pyc
                               conv.cpython-311.pyc
                               dropout.cpython-311.pyc
                               embedding_ops.cpython-311.pyc
                               functional modules.cpython-311.pyc
                               linear.cpython-311.pyc
                               normalization.cpython-311.pyc
                               rnn.cpython-311.pyc
                               utils.cpython-311.pyc
                                __init__.cpython-311.pyc
                   +--- reference
                   1 1
                    | +---modules
                       conv.py
                              linear.py
                               rnn.py
                               sparse.py
                               utils.py
                                __init__.py
                            \---__pycache__
                                   conv.cpython-311.pyc
                                   linear.cpython-311.pyc
                                   rnn.cpython-311.pyc
                                   sparse.cpython-311.pyc
                                   utils.cpython-311.pyc
Ī
                                   __init__.cpython-311.pyc
                __init__.cpython-311.pyc
```

```
\---_pycache_
            functional.cpython-311.pyc
            __init__.cpython-311.pyc
+---utils
       clip grad.py
       convert_parameters.py
        fusion.py
        init.py
        memory_format.py
       parametrizations.py
       parametrize.py
       prune.py
        rnn.py
        spectral norm.py
       stateless.py
       weight_norm.py
        _deprecation_utils.py
        _named_member_accessor.py
       _per_sample_grad.py
        init .py
    +--- expanded weights
            conv_expanded_weights.py
            conv_utils.py
            embedding_expanded_weights.py
            expanded_weights_impl.py
            expanded weights utils.py
            group_norm_expanded_weights.py
            instance norm expanded weights.py
            layer_norm_expanded_weights.py
            linear expanded weights.py
            __init__.py
       \---_pycache__
               conv expanded weights.cpython-311.pyc
                conv_utils.cpython-311.pyc
                embedding expanded weights.cpython-311.pyc
               expanded_weights_impl.cpython-311.pyc
                expanded weights utils.cpython-311.pyc
               group_norm_expanded_weights.cpython-311.pyc
                instance_norm_expanded_weights.cpython-311.pyc
               layer_norm_expanded_weights.cpython-311.pyc
               linear_expanded_weights.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache__
            clip_grad.cpython-311.pyc
            convert parameters.cpython-311.pyc
            fusion.cpython-311.pyc
            init.cpython-311.pyc
```

```
memory_format.cpython-311.pyc
                parametrizations.cpython-311.pyc
                parametrize.cpython-311.pyc
                prune.cpython-311.pyc
                rnn.cpython-311.pyc
                spectral norm.cpython-311.pyc
                stateless.cpython-311.pyc
                weight_norm.cpython-311.pyc
                _deprecation_utils.cpython-311.pyc
                _named_member_accessor.cpython-311.pyc
                _per_sample_grad.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
            common types.cpython-311.pyc
            cpp.cpython-311.pyc
            functional.cpython-311.pyc
            grad.cpython-311.pyc
            init.cpython-311.pyc
            parameter.cpython-311.pyc
            reduction.cpython-311.pyc
            __init__.cpython-311.pyc
+---onnx
        errors.py
        operators.py
        symbolic_caffe2.py
        symbolic helper.py
        symbolic_opset10.py
        symbolic opset11.py
        symbolic_opset12.py
        symbolic opset13.py
        symbolic_opset14.py
        symbolic opset15.py
        symbolic_opset16.py
        symbolic opset17.py
        symbolic_opset18.py
        symbolic opset19.py
        symbolic_opset20.py
        symbolic opset7.py
        symbolic_opset8.py
        symbolic_opset9.py
        utils.py
        verification.py
        constants.py
        _deprecation.py
        _experimental.py
        _exporter_states.py
        _flags.py
_globals.py
        onnx supported ops.py
```

```
_type_utils.py
                       __init__.py
                   +---_internal
                   | |
                         io_adapter.py
                           jit utils.py
                           onnxruntime.py
                           onnx proto utils.py
                           registration.py
                           _exporter_legacy.py
                           _lazy_import.py
                           __init__.py
                       +---diagnostics
                               diagnostic.py
                              _rules.py
                               __init__.py
                           +---infra
                         context.py
                                   decorator.py
                                   formatter.py
                                   utils.py
                                   _infra.py
                                   init .py
                               +---sarif
                                       version.py
                                       _address.py
                                       artifact.py
                                       _artifact_change.py
                                       _artifact_content.py
                                       _artifact_location.py
                                       attachment.py
                                       _code_flow.py
                                       configuration override.py
                                       _conversion.py
                                       edge.py
                                       _edge_traversal.py
                                       exception.py
                                       _external_properties.py
                                       _external_property_file_reference.py
                                       _external_property_file_references.py
                                       _fix.py
                                       _graph.py
                                       _graph_traversal.py
Ī
                                       invocation.py
                                       _location.py
                                       _location_relationship.py
                                       _logical_location.py
                                       message.py
```

```
_multiformat_message_string.py
    node.py
    _notification.py
    _physical_location.py
    _property_bag.py
    rectangle.py
    _region.py
    replacement.py
    _reporting_configuration.py
    _reporting_descriptor.py
    _reporting_descriptor_reference.py
    _reporting_descriptor_relationship.py
    result.py
    _result_provenance.py
    run.py
    _run_automation_details.py
    _sarif_log.py
    _special_locations.py
    stack.py
    _stack_frame.py
    suppression.py
    _thread_flow.py
    thread flow location.py
    _tool.py
    tool component.py
    _tool_component_reference.py
    _translation_metadata.py
    _version_control_details.py
    _web_request.py
    web response.py
     _init__.py
\---_pycache_
        version.cpython-311.pyc
        _address.cpython-311.pyc
        artifact.cpython-311.pyc
        _artifact_change.cpython-311.pyc
        artifact content.cpython-311.pyc
        _artifact_location.cpython-311.pyc
        attachment.cpython-311.pyc
        _code_flow.cpython-311.pyc
        _configuration_override.cpython-311.pyc
        _conversion.cpython-311.pyc
        _edge.cpython-311.pyc
        edge traversal.cpython-311.pyc
        _exception.cpython-311.pyc
        _external_properties.cpython-311.pyc
        _external_property_file_reference.cpython-311.pyc
        _external_property_file_references.cpython-311.pyc
        _fix.cpython-311.pyc
        graph.cpython-311.pyc
```

```
_graph_traversal.cpython-311.pyc
                invocation.cpython-311.pyc
                _location.cpython-311.pyc
                _location_relationship.cpython-311.pyc
                _logical_location.cpython-311.pyc
                message.cpython-311.pyc
                _multiformat_message_string.cpython-311.pyc
                _node.cpython-311.pyc
                _notification.cpython-311.pyc
                _physical_location.cpython-311.pyc
                _property_bag.cpython-311.pyc
                _rectangle.cpython-311.pyc
                region.cpython-311.pyc
                _replacement.cpython-311.pyc
                reporting configuration.cpython-311.pyc
                _reporting_descriptor.cpython-311.pyc
                _reporting_descriptor_reference.cpython-311.pyc
                _reporting_descriptor_relationship.cpython-311.pyc
                result.cpython-311.pyc
                _result_provenance.cpython-311.pyc
                run.cpython-311.pyc
                _run_automation_details.cpython-311.pyc
                sarif log.cpython-311.pyc
                _special_locations.cpython-311.pyc
                _stack.cpython-311.pyc
                _stack_frame.cpython-311.pyc
                _suppression.cpython-311.pyc
                thread flow.cpython-311.pyc
                _thread_flow_location.cpython-311.pyc
                tool.cpython-311.pyc
                _tool_component.cpython-311.pyc
                _tool_component_reference.cpython-311.pyc
                _translation_metadata.cpython-311.pyc
                _version_control_details.cpython-311.pyc
                _web_request.cpython-311.pyc
                web response.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache_
            context.cpython-311.pyc
            decorator.cpython-311.pyc
            formatter.cpython-311.pyc
            utils.cpython-311.pyc
            _infra.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache_
       _diagnostic.cpython-311.pyc
        rules.cpython-311.pyc
        __init__.cpython-311.pyc
```

```
| +---exporter
                     1 1
                              _analysis.py
                     _building.py
                              _capture_strategies.py
_compat.py
                              core.py
                              _decomp.py
                              dispatching.py
                              _errors.py
                              _fx_passes.py
                              _ir_passes.py
                              _isolated.py
                              _onnx_program.py
                              _registration.py
                              reporting.py
                             _schemas.py
                              _tensors.py
                              _testing.py
                              verification.py
                              __init__.py
                         +---_torchlib
                            _torchlib_registry.py
                                __init__.py
                         | | hop.py
                                      __init__.py
                                  \--- pycache
                                         hop.cpython-311.pyc
                                         __init__.cpython-311.pyc
                             \---__pycache__
                                      _torchlib_registry.cpython-311.pyc
                                      __init__.cpython-311.pyc
                          \---_pycache_
                                  _analysis.cpython-311.pyc
                                  building.cpython-311.pyc
                                  _capture_strategies.cpython-311.pyc
                                  _compat.cpython-311.pyc
                                  _core.cpython-311.pyc
                                  _decomp.cpython-311.pyc
                                  _dispatching.cpython-311.pyc
                                  _errors.cpython-311.pyc
Ī
                                  _fx_passes.cpython-311.pyc
                                  _ir_passes.cpython-311.pyc
                                  _isolated.cpython-311.pyc
                                  _onnx_program.cpython-311.pyc
                                  registration.cpython-311.pyc
```

```
_reporting.cpython-311.pyc
                 schemas.cpython-311.pyc
                _tensors.cpython-311.pyc
                 _testing.cpython-311.pyc
                 _verification.cpython-311.pyc
                 init .cpython-311.pyc
             decomposition_skip.py
    decomposition_table.py
     1
             diagnostics.py
             dynamo_graph_extractor.py
             fx onnx interpreter.py
             fx_symbolic_graph_extractor.py
             onnxfunction dispatcher.py
            patcher.py
             registration.py
             serialization.py
             type_utils.py
            _pass.py
             init .py
         +---analysis
       | unsupported_nodes.py
                 init .py
            \---__pycache__
                   unsupported_nodes.cpython-311.pyc
                    __init__.cpython-311.pyc
         +---passes
                decomp.py
                functionalization.py
                modularization.py
                readability.py
                type promotion.py
                virtualization.py
                 utils.py
                 __init__.py
             \---_pycache__
                    decomp.cpython-311.pyc
                    functionalization.cpython-311.pyc
                    modularization.cpython-311.pyc
                    readability.cpython-311.pyc
                    type_promotion.cpython-311.pyc
                    virtualization.cpython-311.pyc
                    _utils.cpython-311.pyc
                     __init__.cpython-311.pyc
| | \--- pycache
```

```
decomposition_skip.cpython-311.pyc
               decomposition table.cpython-311.pyc
               diagnostics.cpython-311.pyc
               dynamo graph extractor.cpython-311.pyc
                fx_onnx_interpreter.cpython-311.pyc
                fx symbolic graph extractor.cpython-311.pyc
               onnxfunction_dispatcher.cpython-311.pyc
               patcher.cpython-311.pyc
               registration.cpython-311.pyc
               serialization.cpython-311.pyc
               type utils.cpython-311.pyc
               _pass.cpython-311.pyc
                init .cpython-311.pyc
   \--- pycache
            io_adapter.cpython-311.pyc
            jit utils.cpython-311.pyc
            onnxruntime.cpython-311.pyc
            onnx_proto_utils.cpython-311.pyc
            registration.cpython-311.pyc
           exporter legacy.cpython-311.pyc
           _lazy_import.cpython-311.pyc
            init .cpython-311.pyc
\--- pycache
       errors.cpython-311.pyc
       operators.cpython-311.pyc
       symbolic caffe2.cpython-311.pyc
       symbolic_helper.cpython-311.pyc
       symbolic opset10.cpython-311.pyc
       symbolic_opset11.cpython-311.pyc
       symbolic opset12.cpython-311.pyc
       symbolic_opset13.cpython-311.pyc
       symbolic opset14.cpython-311.pyc
       symbolic_opset15.cpython-311.pyc
       symbolic opset16.cpython-311.pyc
       symbolic_opset17.cpython-311.pyc
        symbolic opset18.cpython-311.pyc
       symbolic_opset19.cpython-311.pyc
        symbolic opset20.cpython-311.pyc
        symbolic_opset7.cpython-311.pyc
       symbolic_opset8.cpython-311.pyc
       symbolic_opset9.cpython-311.pyc
       utils.cpython-311.pyc
       verification.cpython-311.pyc
        _constants.cpython-311.pyc
       _deprecation.cpython-311.pyc
       _experimental.cpython-311.pyc
       exporter states.cpython-311.pyc
        _flags.cpython-311.pyc
       globals.cpython-311.pyc
```

```
_onnx_supported_ops.cpython-311.pyc
           _type_utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---optim
       adadelta.py
        adagrad.py
        adam.py
       adamax.py
        adamw.py
       asgd.py
       lbfgs.py
       lr scheduler.py
       nadam.py
       optimizer.py
       radam.py
       rmsprop.py
       rprop.py
       sgd.py
       sparse_adam.py
       swa utils.py
        _adafactor.py
       functional.py
       __init__.py
   +--- multi tensor
           __init__.py
           __init__.pyi
       \---_pycache_
               __init__.cpython-311.pyc
   \---_pycache__
            adadelta.cpython-311.pyc
            adagrad.cpython-311.pyc
            adam.cpython-311.pyc
            adamax.cpython-311.pyc
            adamw.cpython-311.pyc
            asgd.cpython-311.pyc
            lbfgs.cpython-311.pyc
            lr_scheduler.cpython-311.pyc
            nadam.cpython-311.pyc
            optimizer.cpython-311.pyc
            radam.cpython-311.pyc
            rmsprop.cpython-311.pyc
            rprop.cpython-311.pyc
            sgd.cpython-311.pyc
            sparse_adam.cpython-311.pyc
            swa_utils.cpython-311.pyc
            _adafactor.cpython-311.pyc
            functional.cpython-311.pyc
```

```
__init__.cpython-311.pyc
   +---package
           file_structure_representation.py
       find_file_dependencies.py
           glob group.py
           importer.py
           package_exporter.py
           package_importer.py
            _digraph.py
            _directory_reader.py
            _importlib.py
           mangling.py
           _mock.py
            package pickler.py
           _package_unpickler.py
           stdlib.py
            __init__.py
       +---analyze
       | | find_first_use_of_broken_modules.py
        | is_from_package.py
               trace dependencies.py
               __init__.py
           \---_pycache_
                   find_first_use_of_broken_modules.cpython-311.pyc
                   is_from_package.cpython-311.pyc
                   trace_dependencies.cpython-311.pyc
                    __init__.cpython-311.pyc
        \---_pycache__
                file_structure_representation.cpython-311.pyc
                find file dependencies.cpython-311.pyc
               glob_group.cpython-311.pyc
               importer.cpython-311.pyc
               package_exporter.cpython-311.pyc
               package importer.cpython-311.pyc
                _digraph.cpython-311.pyc
                directory reader.cpython-311.pyc
                _importlib.cpython-311.pyc
                _mangling.cpython-311.pyc
                _mock.cpython-311.pyc
               _package_pickler.cpython-311.pyc
                package unpickler.cpython-311.pyc
                _stdlib.cpython-311.pyc
                __init__.cpython-311.pyc
   +---profiler
      itt.py
| | profiler.py
```

```
python_tracer.py
                       _memory_profiler.py
                       _pattern_matcher.py
                       utils.py
                       __init__.py
                   \---_pycache__
                           itt.cpython-311.pyc
                           profiler.cpython-311.pyc
                           python_tracer.cpython-311.pyc
                           _memory_profiler.cpython-311.pyc
                           _pattern_matcher.cpython-311.pyc
                           utils.cpython-311.pyc
                           __init__.cpython-311.pyc
               +---quantization
                       fake_quantize.py
                       fuser_method_mappings.py
                       fuse modules.py
                       observer.py
                       qconfig.py
                       quantization_mappings.py
                       quantize.py
                       quantize_fx.py
                       quantize_jit.py
                       quant_type.py
                       stubs.py
                       utils.py
                       _numeric_suite.py
                       numeric suite fx.py
                       _quantized_conversions.py
                       __init__.py
                   1 1
                           convert.py
                           fuse.py
                           fusion_patterns.py
                           graph module.py
                           match_utils.py
                           pattern utils.py
                           prepare.py
                           quantization_patterns.py
                           quantization_types.py
                           utils.py
                           equalize.py
                           __init__.py
ı
                       \---__pycache__
                               convert.cpython-311.pyc
                               fuse.cpython-311.pyc
           fusion patterns.cpython-311.pyc
```

```
graph_module.cpython-311.pyc
                match utils.cpython-311.pyc
                pattern_utils.cpython-311.pyc
                prepare.cpython-311.pyc
                quantization_patterns.cpython-311.pyc
                quantization types.cpython-311.pyc
                utils.cpython-311.pyc
                _equalize.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
            fake_quantize.cpython-311.pyc
            fuser method mappings.cpython-311.pyc
            fuse_modules.cpython-311.pyc
            observer.cpython-311.pyc
            qconfig.cpython-311.pyc
            quantization_mappings.cpython-311.pyc
            quantize.cpython-311.pyc
            quantize fx.cpython-311.pyc
            quantize_jit.cpython-311.pyc
            quant type.cpython-311.pyc
            stubs.cpython-311.pyc
            utils.cpython-311.pyc
            _numeric_suite.cpython-311.pyc
            _numeric_suite_fx.cpython-311.pyc
            _quantized_conversions.cpython-311.pyc
            __init__.cpython-311.pyc
+---share
   \---cmake
        +---ATen
                ATenConfig.cmake
       +---Caffe2
               Caffe2Config.cmake
                Caffe2Targets-release.cmake
                Caffe2Targets.cmake
                FindCUDAToolkit.cmake
                FindCUDSS.cmake
                FindCUSPARSELT.cmake
                FindSYCLToolkit.cmake
           +---Modules CUDA fix
                    FindCUDA.cmake
                    FindCUDNN.cmake
                \---upstream
                        {\tt CMakeInitializeConfigs.cmake}
                        FindCUDA.cmake
                        FindPackageHandleStandardArgs.cmake
                        FindPackageMessage.cmake
```

```
\---FindCUDA
                                        make2cmake.cmake
                                        parse cubin.cmake
                                        run_nvcc.cmake
                                        select compute arch.cmake
                         \---public
                                cuda.cmake
                                gflags.cmake
                                glog.cmake
                                LoadHIP.cmake
                                mkl.cmake
                                mkldnn.cmake
                                protobuf.cmake
                                utils.cmake
                                xpu.cmake
                     \---Torch
                             TorchConfig.cmake
                             TorchConfigVersion.cmake
             +---signal
              +---windows
                  | | windows.py
                  \---__pycache__
                            windows.cpython-311.pyc
                             __init__.cpython-311.pyc
                 \---__pycache__
                         __init__.cpython-311.pyc
             +---sparse
                 | semi structured.py
                  | _semi_structured_conversions.py
                    semi structured ops.py
                 | _triton_ops.py
                     _triton_ops_meta.py
                  | __init__.py
                 \--- pycache
                         semi_structured.cpython-311.pyc
Ī
                         _semi_structured_conversions.cpython-311.pyc
                         _semi_structured_ops.cpython-311.pyc
                         _triton_ops.cpython-311.pyc
                         _triton_ops_meta.cpython-311.pyc
                         __init__.cpython-311.pyc
```

```
+---special
              \---_pycache_
                          __init__.cpython-311.pyc
               +---testing
                  | _comparison.py
                      _creation.py
                      _utils.py
                      __init__.py
                  +---_internal
                     autocast test lists.py
                          autograd_function_db.py
                          check_kernel_launches.py
ı
                          common_cuda.py
                          common_device_type.py
                      common_distributed.py
                          common_dist_composable.py
                      common_dtype.py
                          common fsdp.py
                          common_jit.py
                          common_methods_invocations.py
                          common mkldnn.py
                          common_modules.py
                          common nn.py
                          common_optimizers.py
                  1
                      1
                          common pruning.py
                          common_quantization.py
                          common_quantized.py
                       -
                          common_subclass.py
                          common_utils.py
                          composite_compliance.py
                          custom_op_db.py
                          custom_tensor.py
                          dist utils.py
                          dynamo_test_failures.py
                          fake config module.py
                          hop_db.py
                          hypothesis_utils.py
                          inductor_utils.py
                          jit_metaprogramming_utils.py
                          jit utils.py
                  logging_tensor.py
                       ı
                          logging_utils.py
                          quantization_torch_package_models.py
                  1
                      static module.py
                          subclasses.py
                          torchbind impls.py
```

```
| | | triton_utils.py
| | | two_tensor.py
      1
                   __init__.cpython-311.pyc
          | +---data
1
          | | network1.py
          | | network2.py
1
          1
          Ī
                   network1.cpython-311.pyc
                   network2.cpython-311.pyc
                    __init__.cpython-311.pyc
1
        | +---distributed
1
          | | checkpoint_utils.py
             | | common state dict.py
          | | ddp_under_dist_autograd_test.py
            | | distributed_test.py
            | | distributed utils.py
          | | | fake_pg.py
            | | multi threaded pg.py
1
            | | rpc_utils.py
                 __init__.py
          1
          | | +---nn
          1
            | | +---api
Τ
            | | remote_module_test.py
1
            1
            remote module test.cpython-311.pyc
                        __init__.cpython-311.pyc
Τ
          __init__.cpython-311.pyc
          | | +---rpc
Ī
          | | | dist_autograd_test.py
          | | | dist_optimizer_test.py
          | | | faulty_agent_rpc_test.py
          | | | faulty_rpc_agent_test_fixture.py
      | | | | rpc_agent_test_fixture.py
```

```
| | | tensorpipe_rpc_agent_test_fixture.py
                   __init__.py
      | | | parameter_server_test.py
            | | reinforcement_learning_rpc_test.py
                     __init__.py
                   \---_pycache_
                        parameter_server_test.cpython-311.pyc
                         reinforcement_learning_rpc_test.cpython-311.pyc
                          __init__.cpython-311.pyc
          | | +---jit
          | | | dist_autograd_test.py
                  | rpc_test.py
                   | rpc_test_faulty.py
                       __init__.py
         \---_pycache_
                         dist_autograd_test.cpython-311.pyc
                         rpc test.cpython-311.pyc
                          rpc_test_faulty.cpython-311.pyc
                          __init__.cpython-311.pyc
          | \---_pycache_
                      dist_autograd_test.cpython-311.pyc
                       dist_optimizer_test.cpython-311.pyc
                      faulty agent rpc test.cpython-311.pyc
                      faulty_rpc_agent_test_fixture.cpython-311.pyc
                      rpc_agent_test_fixture.cpython-311.pyc
                      rpc_test.cpython-311.pyc
                       tensorpipe_rpc_agent_test_fixture.cpython-311.pyc
                       __init__.cpython-311.pyc
         | +---_shard
         | | test common.py
            | +---sharded_tensor
                  | _test_ops_common.py
            | | | _test_st_common.py
          | __init__.py
                  \---__pycache__
                         _test_ops_common.cpython-311.pyc
                         _test_st_common.cpython-311.pyc
                          __init__.cpython-311.pyc
```

```
test_common.cpython-311.pyc
                  __init__.cpython-311.pyc
  | +---_tensor
  | | common_dtensor.py
              __init__.py
     | \---_pycache__
                 common dtensor.cpython-311.pyc
                  __init__.cpython-311.pyc
   -
      \---__pycache__
              checkpoint utils.cpython-311.pyc
              common_state_dict.cpython-311.pyc
              ddp under dist autograd test.cpython-311.pyc
              distributed_test.cpython-311.pyc
              distributed_utils.cpython-311.pyc
              fake_pg.cpython-311.pyc
              multi threaded pg.cpython-311.pyc
              rpc_utils.cpython-311.pyc
              init .cpython-311.pyc
  +---generated
| | annotated_fn_args.py
  | \---__pycache__
             annotated fn args.cpython-311.pyc
              __init__.cpython-311.pyc
  +---opinfo
  | | core.py
   | | refs.py
          utils.py
           __init__.py
   | +---definitions
             linalg.py
              nested.py
              signal.py
              sparse.py
              special.py
              _masked.py
               __init__.py
     \---_pycache__
                  fft.cpython-311.pyc
                  linalg.cpython-311.pyc
                  nested.cpython-311.pyc
                  signal.cpython-311.pyc
```

```
sparse.cpython-311.pyc
                special.cpython-311.pyc
                _masked.cpython-311.pyc
                 __init__.cpython-311.pyc
     \--- pycache
            core.cpython-311.pyc
             refs.cpython-311.pyc
            utils.cpython-311.pyc
             __init__.cpython-311.pyc
 +---optests
1 1
        aot autograd.py
         autograd_registration.py
         fake tensor.py
        generate_tests.py
        make_fx.py
         __init__.py
   \---_pycache_
            aot autograd.cpython-311.pyc
            autograd_registration.cpython-311.pyc
             fake tensor.cpython-311.pyc
            generate_tests.cpython-311.pyc
            make fx.cpython-311.pyc
             __init__.cpython-311.pyc
+---test module
        future_div.py
        no future div.py
         __init__.py
    \---_pycache__
            future div.cpython-311.pyc
            no_future_div.cpython-311.pyc
             init .cpython-311.pyc
 \--- pycache
         autocast_test_lists.cpython-311.pyc
         autograd function db.cpython-311.pyc
         check_kernel_launches.cpython-311.pyc
         common_cuda.cpython-311.pyc
         common_device_type.cpython-311.pyc
         common_distributed.cpython-311.pyc
         common dist composable.cpython-311.pyc
         common_dtype.cpython-311.pyc
         common fsdp.cpython-311.pyc
         common_jit.cpython-311.pyc
         common methods invocations.cpython-311.pyc
         common_mkldnn.cpython-311.pyc
         common modules.cpython-311.pyc
```

```
common_nn.cpython-311.pyc
                common optimizers.cpython-311.pyc
                common_pruning.cpython-311.pyc
                common quantization.cpython-311.pyc
                common_quantized.cpython-311.pyc
                common subclass.cpython-311.pyc
                common_utils.cpython-311.pyc
                composite_compliance.cpython-311.pyc
                custom_op_db.cpython-311.pyc
                custom_tensor.cpython-311.pyc
                dist utils.cpython-311.pyc
                dynamo_test_failures.cpython-311.pyc
                fake config module.cpython-311.pyc
                hop_db.cpython-311.pyc
                hypothesis utils.cpython-311.pyc
                inductor_utils.cpython-311.pyc
                jit_metaprogramming_utils.cpython-311.pyc
                jit_utils.cpython-311.pyc
                logging tensor.cpython-311.pyc
                logging_utils.cpython-311.pyc
                quantization torch package models.cpython-311.pyc
                static_module.cpython-311.pyc
                subclasses.cpython-311.pyc
                torchbind_impls.cpython-311.pyc
                triton_utils.cpython-311.pyc
                two tensor.cpython-311.pyc
                __init__.cpython-311.pyc
   \---_pycache__
            comparison.cpython-311.pyc
            _creation.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---utils
       backend registration.py
       bundled_inputs.py
        checkpoint.py
       collect_env.py
        cpp backtrace.py
       cpp_extension.py
        deterministic.py
       dlpack.py
        file_baton.py
        flop counter.py
       hooks.py
       mkldnn.py
       mobile_optimizer.py
       model zoo.py
       module_tracker.py
        show pickle.py
```

```
throughput_benchmark.py
                     weak.py
                     _backport_slots.py
                     _config_module.py
                     _config_typing.pyi
                     _content_store.py
                     _contextlib.py
                     _cpp_extension_versioner.py
                     _cxx_pytree.py
                     _device.py
                     _exposed_in.py
                     _foreach_utils.py
                     _freeze.py
                     _get_clean_triton.py
                     import utils.py
                     _mode_utils.py
                     _ordered_set.py
                     _python_dispatch.py
                     _pytree.py
                     _stats.py
                     _thunk.py
                     _traceback.py
                     triton.py
                     _typing_utils.py
                     _zip.py
                     \_init\_.py
                 +---backcompat
                1 1
                    \---__pycache__
                            __init__.cpython-311.pyc
                 +---benchmark
                 +---examples
                    | | blas_compare_setup.py
                       | compare.py
                    1 1
                            op_benchmark.py
                            simple_timeit.py
                            spectral_ops_fuzz_test.py
                    - 1
                            __init__.py
                    | \---__pycache__
Ī
                                blas_compare_setup.cpython-311.pyc
                                compare.cpython-311.pyc
                                fuzzer.cpython-311.pyc
                                op_benchmark.cpython-311.pyc
                                simple timeit.cpython-311.pyc
```

```
spectral_ops_fuzz_test.cpython-311.pyc
                                  __init__.cpython-311.pyc
                      +---op fuzzers
                     | | binary.py
                              sparse binary.py
                              sparse_unary.py
                              spectral.py
                              unary.py
                              __init__.py
                      1
                          - 1
                          \---_pycache__
                                  binary.cpython-311.pyc
                                  sparse_binary.cpython-311.pyc
                                  sparse unary.cpython-311.pyc
                                  spectral.cpython-311.pyc
                                  unary.cpython-311.pyc
                                  __init__.cpython-311.pyc
                      +---utils
                      common.py
                      1 1
                              compare.py
                              compile.py
                              cpp_jit.py
                              fuzzer.py
                              sparse_fuzzer.py
                              timeit_template.cpp
                              timer.py
                              _stubs.py
                              __init__.py
                          +---valgrind_wrapper
                       | | callgrind.h
                                  compat_bindings.cpp
                                  timer_callgrind_template.cpp
                                  timer interface.py
                                  valgrind.h
                                  init .py
                              \--- pycache
                                     timer_interface.cpython-311.pyc
                                      __init__.cpython-311.pyc
                          \---_pycache__
                                  common.cpython-311.pyc
                                  compare.cpython-311.pyc
Ī
                                  compile.cpython-311.pyc
                                  cpp_jit.cpython-311.pyc
                                  fuzzer.cpython-311.pyc
                                  sparse_fuzzer.cpython-311.pyc
                                  timer.cpython-311.pyc
```

```
_stubs.cpython-311.pyc
                       __init__.cpython-311.pyc
            | \---__pycache__
__init__.cpython-311.pyc
1
       | +---bottleneck
            | | __init__.py
            | | __main__.py
            | \---__pycache__
                    __init__.cpython-311.pyc
                     __main__.cpython-311.pyc
       +---data
       | | dataloader.py
Ī
            | | dataset.py
            | | distributed.py
I
            | | graph.py
            | | graph settings.py
            | | sampler.py
1
              | __init__.py
           | +---datapipes
            | | datapipe.py
              | | datapipe.pyi
              | | gen_pyi.py
              | | _decorator.py
              | | hook iterator.py
              | | _typing.py
            | +---dataframe
             | | | dataframes.py
                 | | dataframe wrapper.py
1
               | | datapipes.py
              | | structures.py
1
              Τ
                          dataframes.cpython-311.pyc
                         dataframe_wrapper.cpython-311.pyc
                         datapipes.cpython-311.pyc
                          structures.cpython-311.pyc
                          __init__.cpython-311.pyc
Ī
            | | +---iter
            | | | callable.py
            | | | combinatorics.py
```

```
filelister.py
        fileopener.py
        grouping.py
        routeddecoder.py
        selecting.py
        sharding.py
        streamreader.py
        utils.py
        __init__.py
    \---__pycache__
            callable.cpython-311.pyc
            combinatorics.cpython-311.pyc
            combining.cpython-311.pyc
            filelister.cpython-311.pyc
            fileopener.cpython-311.pyc
            grouping.cpython-311.pyc
            routeddecoder.cpython-311.pyc
            selecting.cpython-311.pyc
            sharding.cpython-311.pyc
            streamreader.cpython-311.pyc
            utils.cpython-311.pyc
            init .cpython-311.pyc
        callable.py
combinatorics.py
        combining.py
        grouping.py
        utils.py
        __init__.py
    \---_pycache__
            callable.cpython-311.pyc
            combinatorics.cpython-311.pyc
            combining.cpython-311.pyc
            grouping.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---utils
        decoder.py
        snapshot.py
        init .py
    \---_pycache_
            common.cpython-311.pyc
            decoder.cpython-311.pyc
            snapshot.cpython-311.pyc
            init .cpython-311.pyc
```

```
\--- pycache
                      datapipe.cpython-311.pyc
                      gen_pyi.cpython-311.pyc
                      _decorator.cpython-311.pyc
                      hook iterator.cpython-311.pyc
                      _typing.cpython-311.pyc
                      __init__.cpython-311.pyc
          +---_utils
      | | collate.py
             | fetch.py
          | | pin memory.py
          | | signal_handling.py
                  worker.py
                  __init__.py
             \---__pycache__
                      collate.cpython-311.pyc
                      fetch.cpython-311.pyc
                      pin memory.cpython-311.pyc
                      signal_handling.cpython-311.pyc
                      worker.cpython-311.pyc
                       __init__.cpython-311.pyc
           \---_pycache_
                   backward_compatibility.cpython-311.pyc
                   dataloader.cpython-311.pyc
                   dataset.cpython-311.pyc
                  distributed.cpython-311.pyc
                  graph.cpython-311.pyc
                   graph settings.cpython-311.pyc
                   sampler.cpython-311.pyc
                   __init__.cpython-311.pyc
       +---hipify
       | | constants.py
         | cuda to hip mappings.py
             hipify_python.py
               version.py
               __init__.py
          \---_pycache_
                   constants.cpython-311.pyc
                   cuda to hip mappings.cpython-311.pyc
                  hipify_python.cpython-311.pyc
                  version.cpython-311.pyc
                   __init__.cpython-311.pyc
      +---jit
| | | log extract.py
```

```
log_extract.cpython-311.pyc
                        __init__.cpython-311.pyc
             +---model_dump
           | | htm.mjs
              | | preact.mjs
              | | skeleton.html
                | __init__.py
             | | __main__.py
              | \--- pycache
                       __init__.cpython-311.pyc
                        __main__.cpython-311.pyc
              +---tensorboard
             | | summary.py
             | | writer.py
             | | _convert_np.py
                    embedding.py
             | | _onnx_graph.py
                | _proto_graph.py
                | _pytorch_graph.py
                    _utils.py
                | __init__.py
              | \---__pycache__
                       summary.cpython-311.pyc
                       writer.cpython-311.pyc
                       _convert_np.cpython-311.pyc
                       _embedding.cpython-311.pyc
                       _onnx_graph.cpython-311.pyc
                       _proto_graph.cpython-311.pyc
                       _pytorch_graph.cpython-311.pyc
                        utils.cpython-311.pyc
                        __init__.cpython-311.pyc
         | | +---viz
             | | _cycles.py
             \---__pycache__
                       _cycles.cpython-311.pyc
Ī
                       __init__.cpython-311.pyc
        | +---_strobelight
        | | | cli_function_profiler.py
```

```
\--- pycache
           cli_function_profiler.cpython-311.pyc
            __init__.cpython-311.pyc
+---_sympy
       functions.py
  - 1
       interp.py
       numbers.py
        printers.py
       reference.py
        singleton_int.py
        solve.py
        symbol.py
       value ranges.py
        __init__.py
   \---_pycache_
            functions.cpython-311.pyc
            interp.cpython-311.pyc
           numbers.cpython-311.pyc
           printers.cpython-311.pyc
            reference.cpython-311.pyc
            singleton_int.cpython-311.pyc
            solve.cpython-311.pyc
            symbol.cpython-311.pyc
            value_ranges.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache_
       backend_registration.cpython-311.pyc
        bundled inputs.cpython-311.pyc
        checkpoint.cpython-311.pyc
        collect env.cpython-311.pyc
        cpp_backtrace.cpython-311.pyc
        cpp extension.cpython-311.pyc
        deterministic.cpython-311.pyc
        dlpack.cpython-311.pyc
        file_baton.cpython-311.pyc
        flop counter.cpython-311.pyc
        hooks.cpython-311.pyc
        mkldnn.cpython-311.pyc
        mobile_optimizer.cpython-311.pyc
        model_zoo.cpython-311.pyc
        module_tracker.cpython-311.pyc
        show_pickle.cpython-311.pyc
        throughput_benchmark.cpython-311.pyc
        weak.cpython-311.pyc
        backport slots.cpython-311.pyc
        _config_module.cpython-311.pyc
        content store.cpython-311.pyc
```

```
_contextlib.cpython-311.pyc
            _cpp_extension_versioner.cpython-311.pyc
            _cxx_pytree.cpython-311.pyc
            _device.cpython-311.pyc
            _exposed_in.cpython-311.pyc
            _foreach_utils.cpython-311.pyc
            _freeze.cpython-311.pyc
            _get_clean_triton.cpython-311.pyc
            _import_utils.cpython-311.pyc
            _mode_utils.cpython-311.pyc
            _ordered_set.cpython-311.pyc
            _python_dispatch.cpython-311.pyc
            _pytree.cpython-311.pyc
            _stats.cpython-311.pyc
            _thunk.cpython-311.pyc
            _traceback.cpython-311.pyc
            _triton.cpython-311.pyc
            _typing_utils.cpython-311.pyc
            _zip.cpython-311.pyc
            __init__.cpython-311.pyc
+---xpu
   memory.py
       random.py
       streams.py
        _gpu_trace.py
       _utils.py
        __init__.py
    \---_pycache_
            memory.cpython-311.pyc
            random.cpython-311.pyc
            streams.cpython-311.pyc
            _gpu_trace.cpython-311.pyc
            _utils.cpython-311.pyc
            __init__.cpython-311.pyc
+--- awaits
   | __init__.py
   \---_pycache__
            __init__.cpython-311.pyc
        _aoti.pyi
       _autograd.pyi
        _cpu.pyi
       _cudnn.pyi
       _cusparselt.pyi
       _distributed_autograd.pyi
        _distributed_c10d.pyi
```

```
_distributed_rpc.pyi
           _distributed_rpc_testing.pyi
           _export.pyi
           functions.pyi
           _functorch.pyi
           instruction counter.pyi
           _itt.pyi
           lazy.pyi
           _lazy_ts_backend.pyi
           _monitor.pyi
           _nn.pyi
           _nvtx.pyi
           onnx.pyi
           _profiler.pyi
           VariableFunctions.pyi
           _verbose.pyi
           __init__.pyi
   +---_custom_op
      autograd.py
           functional.py
           impl.py
           __init__.py
       \---_pycache_
               autograd.cpython-311.pyc
               functional.cpython-311.pyc
               impl.cpython-311.pyc
               __init__.cpython-311.pyc
   +---_decomp
   | decompositions.py
          decompositions_for_jvp.py
          decompositions_for_rng.py
           __init__.py
      \---__pycache__
               decompositions.cpython-311.pyc
               decompositions_for_jvp.cpython-311.pyc
               decompositions for rng.cpython-311.pyc
               __init__.cpython-311.pyc
| +---_dispatch
       | python.py
           __init__.py
      \---_pycache__
               python.cpython-311.pyc
               __init__.cpython-311.pyc
| +---_dynamo
```

```
bytecode_analysis.py
    bytecode_transformation.py
    cache_size.py
    callback.py
    codegen.py
    code context.py
    compiled_autograd.py
    comptime.py
    config.py
    convert_frame.py
    create_parameter_op.py
    current_scope_id.py
    debug utils.py
    decorators.py
    device interface.py
    distributed.py
    eval_frame.py
    exc.py
    external_utils.py
    funcname_cache.py
    graph_deduplication.py
    graph_region_tracker.py
    guards.py
    hooks.py
    logging.py
    metrics_context.py
    mutation_guard.py
    output_graph.py
    pgo.py
    profiler.py
    replay_record.py
    resume_execution.py
    side_effects.py
    source.py
    symbolic_convert.py
    tensor_version_op.py
    testing.py
    test case.py
    test_minifier_common.py
    trace rules.py
    types.py
    utils.py
    _trace_wrapped_higher_order_op.py
    __init__.py
+---backends
        common.py
        cudagraphs.py
debugging.py
        distributed.py
        inductor.py
```

```
onnxrt.py
       registry.py
       tensorrt.py
        torchxla.py
       tvm.py
        init .py
   \---_pycache_
           common.cpython-311.pyc
           cudagraphs.cpython-311.pyc
           debugging.cpython-311.pyc
           distributed.cpython-311.pyc
           inductor.cpython-311.pyc
           onnxrt.cpython-311.pyc
           registry.cpython-311.pyc
           tensorrt.cpython-311.pyc
           torchxla.cpython-311.pyc
           tvm.cpython-311.pyc
            __init__.cpython-311.pyc
+---polyfills
      builtins.py
        functools.py
       itertools.py
       loader.py
       operator.py
       os.py
       pytree.py
       sys.py
        __init__.py
    \--- pycache
           builtins.cpython-311.pyc
            functools.cpython-311.pyc
           itertools.cpython-311.pyc
           loader.cpython-311.pyc
           operator.cpython-311.pyc
           os.cpython-311.pyc
           pytree.cpython-311.pyc
           sys.cpython-311.pyc
           __init__.cpython-311.pyc
+---repro
  | after_aot.py
       after dynamo.py
       aoti.py
       __init__.py
  \---__pycache__
           after_aot.cpython-311.pyc
           after dynamo.cpython-311.pyc
```

```
aoti.cpython-311.pyc
            __init__.cpython-311.pyc
+---variables
base.py
        builder.py
        builtin.py
        constant.py
        ctx_manager.py
        dicts.py
        distributed.py
        functions.py
        higher order ops.py
        iter.py
        lazy.py
        lists.py
        misc.py
        nn_module.py
        optimizer.py
        script_object.py
        sdpa.py
        tensor.py
        torch.py
        torch_function.py
        user_defined.py
        __init__.py
    \--- pycache
            base.cpython-311.pyc
            builder.cpython-311.pyc
            builtin.cpython-311.pyc
            constant.cpython-311.pyc
            ctx_manager.cpython-311.pyc
            dicts.cpython-311.pyc
            distributed.cpython-311.pyc
            functions.cpython-311.pyc
            higher_order_ops.cpython-311.pyc
            iter.cpython-311.pyc
            lazy.cpython-311.pyc
            lists.cpython-311.pyc
            misc.cpython-311.pyc
            nn_module.cpython-311.pyc
            optimizer.cpython-311.pyc
            script_object.cpython-311.pyc
            sdpa.cpython-311.pyc
            tensor.cpython-311.pyc
            torch.cpython-311.pyc
            torch_function.cpython-311.pyc
            user defined.cpython-311.pyc
            __init__.cpython-311.pyc
```

```
\---_pycache_
            bytecode analysis.cpython-311.pyc
           bytecode_transformation.cpython-311.pyc
            cache size.cpython-311.pyc
            callback.cpython-311.pyc
            codegen.cpython-311.pyc
            code_context.cpython-311.pyc
            compiled_autograd.cpython-311.pyc
            comptime.cpython-311.pyc
            config.cpython-311.pyc
            convert frame.cpython-311.pyc
            create_parameter_op.cpython-311.pyc
            current scope id.cpython-311.pyc
            debug_utils.cpython-311.pyc
            decorators.cpython-311.pyc
            device_interface.cpython-311.pyc
            distributed.cpython-311.pyc
            eval_frame.cpython-311.pyc
            exc.cpython-311.pyc
            external_utils.cpython-311.pyc
            funcname cache.cpython-311.pyc
            graph_deduplication.cpython-311.pyc
            graph region tracker.cpython-311.pyc
            guards.cpython-311.pyc
            hooks.cpython-311.pyc
            logging.cpython-311.pyc
            metrics_context.cpython-311.pyc
            mutation guard.cpython-311.pyc
            output_graph.cpython-311.pyc
            pgo.cpython-311.pyc
            profiler.cpython-311.pyc
            replay record.cpython-311.pyc
            resume_execution.cpython-311.pyc
            side effects.cpython-311.pyc
            source.cpython-311.pyc
            symbolic convert.cpython-311.pyc
            tensor_version_op.cpython-311.pyc
            testing.cpython-311.pyc
            test_case.cpython-311.pyc
            test minifier common.cpython-311.pyc
            trace_rules.cpython-311.pyc
            types.cpython-311.pyc
            utils.cpython-311.pyc
            _trace_wrapped_higher_order_op.cpython-311.pyc
            init .cpython-311.pyc
+--- export
       converter.py
       error.py
       non_strict_utils.py
       pass base.py
```

```
tools.py
                        utils.py
                        verifier.py
                        wrappers.py
                        __init__.py
                    +---db
                            case.py
                            gen_example.py
                            logging.py
                            __init__.py
                        +---examples
                                assume_constant_result.py
                                autograd function.py
                                class_method.py
                                cond_branch_class_method.py
                                cond_branch_nested_function.py
                                cond_branch_nonlocal_variables.py
                                cond_closed_over_variable.py
                                cond operands.py
                                cond_predicate.py
                                constrain_as_size_example.py
                                constrain_as_value_example.py
                                decorator.py
                                dictionary.py
                                dynamic_shape_assert.py
                                dynamic shape constructor.py
                                dynamic_shape_if_guard.py
                        ı
                                dynamic shape map.py
                                dynamic_shape_round.py
                                dynamic_shape_slicing.py
                                dynamic_shape_view.py
                                fn_with_kwargs.py
                                list_contains.py
                                list_unpack.py
                                model_attr_mutation.py
                                nested function.py
                                null_context_manager.py
                                optional input.py
                                pytree_flatten.py
                                scalar_output.py
                                specialized_attribute.py
                                static_for_loop.py
                                static if.py
                                tensor_setattr.py
ı
                                type_reflection_method.py
                                unsupported_operator.py
                        user_input_mutation.py
                                __init__.py
```

```
--_pycache
                assume constant result.cpython-311.pyc
                autograd_function.cpython-311.pyc
                class method.cpython-311.pyc
                cond_branch_class_method.cpython-311.pyc
                cond branch nested function.cpython-311.pyc
                cond_branch_nonlocal_variables.cpython-311.pyc
                cond_closed_over_variable.cpython-311.pyc
                cond operands.cpython-311.pyc
                cond_predicate.cpython-311.pyc
                constrain_as_size_example.cpython-311.pyc
                constrain_as_value_example.cpython-311.pyc
                decorator.cpython-311.pyc
                dictionary.cpython-311.pyc
                dynamic shape assert.cpython-311.pyc
                dynamic_shape_constructor.cpython-311.pyc
                dynamic_shape_if_guard.cpython-311.pyc
                dynamic_shape_map.cpython-311.pyc
                dynamic shape round.cpython-311.pyc
                dynamic_shape_slicing.cpython-311.pyc
                dynamic shape view.cpython-311.pyc
                fn_with_kwargs.cpython-311.pyc
                list contains.cpython-311.pyc
                list_unpack.cpython-311.pyc
                model_attr_mutation.cpython-311.pyc
                nested function.cpython-311.pyc
                null_context_manager.cpython-311.pyc
                optional input.cpython-311.pyc
                pytree_flatten.cpython-311.pyc
                scalar_output.cpython-311.pyc
                specialized_attribute.cpython-311.pyc
                static for loop.cpython-311.pyc
                static_if.cpython-311.pyc
                tensor setattr.cpython-311.pyc
                type_reflection_method.cpython-311.pyc
                unsupported operator.cpython-311.pyc
                user_input_mutation.cpython-311.pyc
                init .cpython-311.pyc
   \--- pycache
            case.cpython-311.pyc
            gen_example.cpython-311.pyc
           logging.cpython-311.pyc
            __init__.cpython-311.pyc
+---passes
        add_runtime_assertions_for_constraints_pass.py
        collect_tracepoints_pass.py
constant folding.py
        functionalize_side_effectful_ops_pass.py
        insert custom op guards.py
```

```
lift_constants_pass.py
       remove runtime assertions.py
       replace_autocast_with_hop_pass.py
        replace quantized ops with standard ops pass.py
       replace_set_grad_with_hop_pass.py
       replace view ops with view copy ops pass.py
       replace_with_hop_pass_util.py
        _node_metadata_hook.py
       init__.py
   \---_pycache_
            add_runtime_assertions_for_constraints_pass.cpython-311.pyc
            collect tracepoints pass.cpython-311.pyc
            constant_folding.cpython-311.pyc
            functionalize side effectful ops pass.cpython-311.pyc
            insert_custom_op_guards.cpython-311.pyc
            lift constants pass.cpython-311.pyc
            remove_runtime_assertions.cpython-311.pyc
            replace_autocast_with_hop_pass.cpython-311.pyc
            replace_quantized_ops_with_standard_ops_pass.cpython-311.pyc
            replace set grad with hop pass.cpython-311.pyc
            replace_view_ops_with_view_copy_ops_pass.cpython-311.pyc
            replace with hop pass util.cpython-311.pyc
            _node_metadata_hook.cpython-311.pyc
            __init__.cpython-311.pyc
+---pass_infra
   | node metadata.py
       proxy_value.py
       init .py
    \--- pycache
           node_metadata.cpython-311.pyc
           proxy value.cpython-311.pyc
            __init__.cpython-311.pyc
+---serde
       aoti schema.py
       dynamic_shapes.py
        schema.py
       schema.thrift
        schema.yaml
       schema_check.py
        serialize.py
       union.py
        __init__.py
   \---_pycache_
           aoti schema.cpython-311.pyc
           dynamic_shapes.cpython-311.pyc
            schema.cpython-311.pyc
```

```
schema_check.cpython-311.pyc
               serialize.cpython-311.pyc
               union.cpython-311.pyc
                __init__.cpython-311.pyc
    \---__pycache__
           converter.cpython-311.pyc
           error.cpython-311.pyc
           non_strict_utils.cpython-311.pyc
           pass_base.cpython-311.pyc
           tools.cpython-311.pyc
           utils.cpython-311.pyc
           verifier.cpython-311.pyc
           wrappers.cpython-311.pyc
            init .cpython-311.pyc
+---_functorch
       aot_autograd.py
       apis.py
       autograd_function.py
       batch norm replacement.py
       benchmark_utils.py
       compilers.py
       compile_utils.py
       config.py
       deprecated.py
       eager_transforms.py
       functional_call.py
        fx_minifier.py
       make functional.py
       partitioners.py
       pyfunctorch.py
       python_key.py
       pytree_hacks.py
       top_operators_github_usage.py
       utils.py
       vmap.py
        __init__.py
   +--- activation checkpointing
           knapsack.py
           __init__.py
       \---__pycache__
               knapsack.cpython-311.pyc
               __init__.cpython-311.pyc
   +---_aot_autograd
   | | autograd_cache.py
          collect_metadata_analysis.py
           dispatch and compile graph.py
```

```
functional_utils.py
        input output analysis.py
       jit_compile_runtime_wrappers.py
        logging utils.py
        runtime_wrappers.py
        schemas.py
        subclass_parametrization.py
        subclass utils.py
        traced function transforms.py
       utils.py
        init .py
    \---__pycache__
            autograd_cache.cpython-311.pyc
            collect metadata analysis.cpython-311.pyc
            dispatch_and_compile_graph.cpython-311.pyc
            functional utils.cpython-311.pyc
            input_output_analysis.cpython-311.pyc
            jit compile runtime wrappers.cpython-311.pyc
            logging_utils.cpython-311.pyc
            runtime wrappers.cpython-311.pyc
            schemas.cpython-311.pyc
            subclass parametrization.cpython-311.pyc
            subclass_utils.cpython-311.pyc
            traced function transforms.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        aot autograd.cpython-311.pyc
        apis.cpython-311.pyc
        autograd function.cpython-311.pyc
        batch_norm_replacement.cpython-311.pyc
        benchmark utils.cpython-311.pyc
        compilers.cpython-311.pyc
        compile utils.cpython-311.pyc
        config.cpython-311.pyc
        deprecated.cpython-311.pyc
        eager_transforms.cpython-311.pyc
        functional call.cpython-311.pyc
        fx_minifier.cpython-311.pyc
        make_functional.cpython-311.pyc
        partitioners.cpython-311.pyc
        pyfunctorch.cpython-311.pyc
        python_key.cpython-311.pyc
        pytree_hacks.cpython-311.pyc
        top_operators_github_usage.cpython-311.pyc
        utils.cpython-311.pyc
        vmap.cpython-311.pyc
        __init__.cpython-311.pyc
```

```
+---_higher_order_ops
        associative scan.py
        auto_functionalize.py
        cond.py
        effects.py
        executorch call delegate.py
        flex_attention.py
        hints wrap.py
        invoke_subgraph.py
        map.py
        out_dtype.py
        prim_hop_base.py
        run const graph.py
        scan.py
        strict mode.py
        torchbind.py
        triton_kernel_wrap.py
        utils.py
        while loop.py
        wrap.py
        init .py
    \---_pycache_
            associative_scan.cpython-311.pyc
            auto_functionalize.cpython-311.pyc
            cond.cpython-311.pyc
            effects.cpython-311.pyc
            executorch call delegate.cpython-311.pyc
            flex_attention.cpython-311.pyc
            hints wrap.cpython-311.pyc
            invoke_subgraph.cpython-311.pyc
            map.cpython-311.pyc
            out_dtype.cpython-311.pyc
            prim_hop_base.cpython-311.pyc
            run_const_graph.cpython-311.pyc
            scan.cpython-311.pyc
            strict_mode.cpython-311.pyc
            torchbind.cpython-311.pyc
            triton_kernel_wrap.cpython-311.pyc
            utils.cpython-311.pyc
            while_loop.cpython-311.pyc
            wrap.cpython-311.pyc
            __init__.cpython-311.pyc
+---_inductor
       aoti_eager.py
        async_compile.py
        autotune_process.py
        bounds.py
        choices.py
        codecache.py
```

```
comms.py
comm_analysis.py
comm_lowering.py
compiler_bisector.py
compile_fx.py
config.py
constant_folding.py
cpp_builder.py
cpu_vec_isa.py
cudagraph_trees.py
cudagraph_utils.py
custom_graph_pass.py
debug.py
decomposition.py
dependencies.py
dtype_propagation.py
exc.py
extern_node_serializer.py
freezing.py
fx_utils.py
graph.py
hooks.py
index propagation.py
inductor_prims.py
ir.py
jagged_lowerings.py
loop_body.py
lowering.py
memory.py
metrics.py
mkldnn_ir.py
mkldnn_lowerings.py
mock_cache.py
ops_handler.py
optimize_indexing.py
output code.py
pattern_matcher.py
quantized lowerings.py
remote_cache.py
scheduler.py
select_algorithm.py
sizevars.py
subgraph_lowering.py
test_case.py
test operators.py
triton_bundler.py
utils.py
virtualized.py
wrapper benchmark.py
__init__.py
```

```
+---autoheuristic
autoheuristic.py
        autoheuristic_utils.py
 1 1
        learnedheuristic interface.py
        learned_heuristic_controller.py
        init .py
     +---artifacts
    | | MixedMMA100.py
            _MixedMMH100.py
            MMRankingA100.py
            _MMRankingH100.py
            PadMMA100.py
        | __init__.py
        \---_pycache_
                MixedMMA100.cpython-311.pyc
                _MixedMMH100.cpython-311.pyc
                MMRankingA100.cpython-311.pyc
                _MMRankingH100.cpython-311.pyc
                PadMMA100.cpython-311.pyc
                __init__.cpython-311.pyc
     \---__pycache__
            autoheuristic.cpython-311.pyc
            autoheuristic utils.cpython-311.pyc
            learnedheuristic_interface.cpython-311.pyc
            learned heuristic controller.cpython-311.pyc
            __init__.cpython-311.pyc
 +---codegen
        aoti_hipify_utils.py
        block_analysis.py
        common.py
        cpp.py
        cpp_bmm_template.py
        cpp_flex_attention_template.py
        cpp gemm template.py
        cpp_micro_gemm.py
        cpp prefix.h
        cpp_template.py
        cpp_template_kernel.py
        cpp_utils.py
        cpp_wrapper_cpu.py
        cpp_wrapper_cpu_array_ref.py
        cpp_wrapper_gpu.py
        cpu_device_op_overrides.py
        cuda_combined_scheduling.py
debug_utils.py
        halide.py
        memory planning.py
```

```
multi_kernel.py
     simd.py
     simd_kernel_features.py
     triton.py
     triton_combo_kernel.py
     triton split scan.py
     triton_utils.py
     wrapper.py
     __init__.py
 +---aoti runtime
         implementation.cpp
         interface.cpp
 +---cuda
cuda_cpp_scheduling.py
         cuda_env.py
         cuda_kernel.py
         cuda template.py
         cutlass_epilogue_gen.py
         cutlass utils.py
         device_op_overrides.py
         gemm template.py
         __init__.py
    +---cutlass_lib_extensions
     | gemm_operation_extensions.py
             __init__.py
         \---_pycache_
                gemm_operation_extensions.cpython-311.pyc
                 __init__.cpython-311.pyc
     \---_pycache__
             cuda_cpp_scheduling.cpython-311.pyc
             cuda env.cpython-311.pyc
             cuda_kernel.cpython-311.pyc
             cuda template.cpython-311.pyc
             cutlass_epilogue_gen.cpython-311.pyc
             cutlass utils.cpython-311.pyc
             device_op_overrides.cpython-311.pyc
             gemm_template.cpython-311.pyc
             __init__.cpython-311.pyc
 +---rocm
 | ck_conv_template.py
   ck_template.py
         ck_universal_gemm_template.py
 compile_command.py
        rocm_benchmark_request.py
        rocm cpp scheduling.py
```

```
rocm_kernel.py
         rocm template.py
         rocm_template_buffer.py
init .py
\--- pycache
             ck_conv_template.cpython-311.pyc
             ck template.cpython-311.pyc
             ck_universal_gemm_template.cpython-311.pyc
             compile_command.cpython-311.pyc
             rocm benchmark request.cpython-311.pyc
             rocm_cpp_scheduling.cpython-311.pyc
             rocm kernel.cpython-311.pyc
             rocm_template.cpython-311.pyc
             rocm template buffer.cpython-311.pyc
             __init__.cpython-311.pyc
| | device op overrides.py
        __init__.py
     \---__pycache__
             device op overrides.cpython-311.pyc
             __init__.cpython-311.pyc
 \--- pycache
         aoti_hipify_utils.cpython-311.pyc
         block analysis.cpython-311.pyc
         common.cpython-311.pyc
         cpp.cpython-311.pyc
         cpp_bmm_template.cpython-311.pyc
         cpp flex attention template.cpython-311.pyc
         cpp_gemm_template.cpython-311.pyc
         cpp micro gemm.cpython-311.pyc
         cpp_template.cpython-311.pyc
         cpp template kernel.cpython-311.pyc
         cpp_utils.cpython-311.pyc
         cpp wrapper cpu.cpython-311.pyc
         cpp_wrapper_cpu_array_ref.cpython-311.pyc
         cpp wrapper gpu.cpython-311.pyc
         cpu_device_op_overrides.cpython-311.pyc
         cuda_combined_scheduling.cpython-311.pyc
         debug_utils.cpython-311.pyc
         halide.cpython-311.pyc
         memory planning.cpython-311.pyc
         multi_kernel.cpython-311.pyc
         simd.cpython-311.pyc
         simd_kernel_features.cpython-311.pyc
         triton.cpython-311.pyc
         triton_combo_kernel.cpython-311.pyc
         triton split scan.cpython-311.pyc
```

```
triton_utils.cpython-311.pyc
            wrapper.cpython-311.pyc
            __init__.cpython-311.pyc
+---compile_worker
       subproc_pool.py
       watchdog.py
       __init__.py
       __main__.py
    \---_pycache_
            subproc_pool.cpython-311.pyc
            watchdog.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---fx passes
       b2b_gemm.py
       binary_folding.py
       ddp_fusion.py
       decompose_mem_bound_mm.py
       dedupe_symint_uses.py
       efficient conv bn eval.py
        freezing_patterns.py
        fuse_attention.py
       group_batch_fusion.py
        joint_graph.py
       micro_pipeline_tp.py
       misc_patterns.py
       mkldnn fusion.py
1
       numeric_utils.py
       pad_mm.py
       post_grad.py
       pre_grad.py
       quantization.py
        reinplace.py
       replace_random.py
        split cat.py
        __init__.py
   +---serialized_patterns
            addmm_pattern.py
           bmm_pattern.py
            mm_pattern.py
            _sfdp_pattern_1.py
           _sfdp_pattern_10.py
           _sfdp_pattern_11.py
           _sfdp_pattern_12.py
   _sfdp_pattern_13.py
           _sfdp_pattern_14.py
  sfdp pattern 15.py
```

```
_sfdp_pattern_16.py
        _sfdp_pattern_17.py
        _sfdp_pattern_18.py
- 1
        _sfdp_pattern_19.py
        _sfdp_pattern_2.py
        sfdp pattern 3.py
        _sfdp_pattern_4.py
        sfdp pattern 5.py
        _sfdp_pattern_6.py
        _sfdp_pattern_7.py
        _sfdp_pattern_8.py
        _sfdp_pattern_9.py
        init .py
    \--- pycache
            addmm_pattern.cpython-311.pyc
            bmm_pattern.cpython-311.pyc
            mm_pattern.cpython-311.pyc
            _sfdp_pattern_1.cpython-311.pyc
            _sfdp_pattern_10.cpython-311.pyc
            _sfdp_pattern_11.cpython-311.pyc
            _sfdp_pattern_12.cpython-311.pyc
            sfdp pattern 13.cpython-311.pyc
            _sfdp_pattern_14.cpython-311.pyc
            sfdp pattern 15.cpython-311.pyc
            _sfdp_pattern_16.cpython-311.pyc
            _sfdp_pattern_17.cpython-311.pyc
            _sfdp_pattern_18.cpython-311.pyc
            _sfdp_pattern_19.cpython-311.pyc
            _sfdp_pattern_2.cpython-311.pyc
            _sfdp_pattern_3.cpython-311.pyc
            _sfdp_pattern_4.cpython-311.pyc
            _sfdp_pattern_5.cpython-311.pyc
            _sfdp_pattern_6.cpython-311.pyc
            _sfdp_pattern_7.cpython-311.pyc
            _sfdp_pattern_8.cpython-311.pyc
            _sfdp_pattern_9.cpython-311.pyc
            init .cpython-311.pyc
\--- pycache
        b2b_gemm.cpython-311.pyc
        binary_folding.cpython-311.pyc
        ddp_fusion.cpython-311.pyc
        decompose_mem_bound_mm.cpython-311.pyc
        dedupe_symint_uses.cpython-311.pyc
        efficient_conv_bn_eval.cpython-311.pyc
        freezing_patterns.cpython-311.pyc
        fuse_attention.cpython-311.pyc
        group_batch_fusion.cpython-311.pyc
        joint_graph.cpython-311.pyc
        micro pipeline tp.cpython-311.pyc
```

```
misc_patterns.cpython-311.pyc
           mkldnn fusion.cpython-311.pyc
           numeric_utils.cpython-311.pyc
           pad mm.cpython-311.pyc
           post_grad.cpython-311.pyc
           pre grad.cpython-311.pyc
           quantization.cpython-311.pyc
            reinplace.cpython-311.pyc
            replace_random.cpython-311.pyc
            split_cat.cpython-311.pyc
            __init__.cpython-311.pyc
+---kernel
       bmm.py
       conv.py
       flex_attention.py
        flex_decoding.py
       mm.py
       mm common.py
       mm_plus_mm.py
       mm scaled.py
       unpack_mixed_mm.py
        init .py
\--- pycache
           bmm.cpython-311.pyc
           conv.cpython-311.pyc
           flex_attention.cpython-311.pyc
            flex_decoding.cpython-311.pyc
           mm.cpython-311.pyc
           mm_common.cpython-311.pyc
           mm_plus_mm.cpython-311.pyc
           mm_scaled.cpython-311.pyc
           unpack mixed mm.cpython-311.pyc
            __init__.cpython-311.pyc
+---package
      build package.py
       package.py
       pt2 archive constants.py
        __init__.py
   \---_pycache_
           build_package.cpython-311.pyc
           package.cpython-311.pyc
           pt2_archive_constants.cpython-311.pyc
           __init__.cpython-311.pyc
+---runtime
autotune_cache.py
  benchmarking.py
```

```
cache_dir_utils.py
        compile tasks.py
        coordinate_descent_tuner.py
        halide helpers.py
       hints.py
        runtime utils.py
        triton_helpers.py
        triton heuristics.py
        init__.py
    \---_pycache_
            autotune_cache.cpython-311.pyc
           benchmarking.cpython-311.pyc
            cache_dir_utils.cpython-311.pyc
            compile tasks.cpython-311.pyc
            coordinate_descent_tuner.cpython-311.pyc
           halide helpers.cpython-311.pyc
           hints.cpython-311.pyc
            runtime utils.cpython-311.pyc
            triton_helpers.cpython-311.pyc
            triton heuristics.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
        aoti eager.cpython-311.pyc
        async compile.cpython-311.pyc
        autotune_process.cpython-311.pyc
       bounds.cpython-311.pyc
        choices.cpython-311.pyc
        codecache.cpython-311.pyc
        comms.cpython-311.pyc
        comm_analysis.cpython-311.pyc
        comm_lowering.cpython-311.pyc
        compiler bisector.cpython-311.pyc
        compile_fx.cpython-311.pyc
        config.cpython-311.pyc
        constant_folding.cpython-311.pyc
        cpp builder.cpython-311.pyc
        cpu_vec_isa.cpython-311.pyc
        cudagraph trees.cpython-311.pyc
        cudagraph_utils.cpython-311.pyc
        custom_graph_pass.cpython-311.pyc
        debug.cpython-311.pyc
        decomposition.cpython-311.pyc
        dependencies.cpython-311.pyc
        dtype_propagation.cpython-311.pyc
        exc.cpython-311.pyc
        extern_node_serializer.cpython-311.pyc
        freezing.cpython-311.pyc
        fx_utils.cpython-311.pyc
        graph.cpython-311.pyc
```

```
hooks.cpython-311.pyc
            index propagation.cpython-311.pyc
            inductor_prims.cpython-311.pyc
            ir.cpython-311.pyc
            jagged_lowerings.cpython-311.pyc
            loop_body.cpython-311.pyc
            lowering.cpython-311.pyc
            memory.cpython-311.pyc
            metrics.cpython-311.pyc
            mkldnn_ir.cpython-311.pyc
            mkldnn lowerings.cpython-311.pyc
            mock_cache.cpython-311.pyc
            ops handler.cpython-311.pyc
            optimize_indexing.cpython-311.pyc
            output_code.cpython-311.pyc
            pattern_matcher.cpython-311.pyc
            quantized_lowerings.cpython-311.pyc
            remote_cache.cpython-311.pyc
            scheduler.cpython-311.pyc
            select_algorithm.cpython-311.pyc
            sizevars.cpython-311.pyc
            subgraph_lowering.cpython-311.pyc
            test_case.cpython-311.pyc
            test_operators.cpython-311.pyc
            triton_bundler.cpython-311.pyc
            utils.cpython-311.pyc
            virtualized.cpython-311.pyc
            wrapper benchmark.cpython-311.pyc
            __init__.cpython-311.pyc
+---_lazy
       closure.py
       computation.py
       config.py
       debug.py
       device context.py
       extract_compiled_graph.py
        ir cache.py
       metrics.py
        tensor factory functions.py
        ts_backend.py
        __init__.py
   1
   \---_pycache__
            closure.cpython-311.pyc
            computation.cpython-311.pyc
            config.cpython-311.pyc
            debug.cpython-311.pyc
            device context.cpython-311.pyc
            extract_compiled_graph.cpython-311.pyc
            ir cache.cpython-311.pyc
```

```
metrics.cpython-311.pyc
           tensor_factory_functions.cpython-311.pyc
           ts_backend.cpython-311.pyc
            __init__.cpython-311.pyc
+---_library
       autograd.py
       custom_ops.py
       fake_class_registry.py
        fake_impl.py
       infer_schema.py
       simple_registry.py
       triton.py
       utils.py
        init .py
    \---_pycache__
           autograd.cpython-311.pyc
           custom_ops.cpython-311.pyc
           fake_class_registry.cpython-311.pyc
           fake impl.cpython-311.pyc
           infer_schema.cpython-311.pyc
           simple registry.cpython-311.pyc
           triton.cpython-311.pyc
           utils.cpython-311.pyc
            __init__.cpython-311.pyc
+--- logging
       scribe.py
       structured.py
       _internal.py
       _registrations.py
       __init__.py
    \---_pycache_
           scribe.cpython-311.pyc
           structured.cpython-311.pyc
           internal.cpython-311.pyc
           _registrations.cpython-311.pyc
           init .cpython-311.pyc
+---_numpy
       fft.py
       linalg.py
       random.py
       _binary_ufuncs_impl.py
       _casting_dicts.py
       _dtypes.py
       _dtypes_impl.py
       _funcs.py
       funcs impl.py
```

```
_getlimits.py
          ndarray.py
          _normalizations.py
           _reductions_impl.py
           _ufuncs.py
           _unary_ufuncs_impl.py
           _util.py
           __init__.py
       +---testing
       | | utils.py
              __init__.py
          \---_pycache__
                   utils.cpython-311.pyc
                   __init__.cpython-311.pyc
       \---_pycache__
               fft.cpython-311.pyc
               linalg.cpython-311.pyc
               random.cpython-311.pyc
               _binary_ufuncs_impl.cpython-311.pyc
               casting dicts.cpython-311.pyc
               _dtypes.cpython-311.pyc
               _dtypes_impl.cpython-311.pyc
               _funcs.cpython-311.pyc
               _funcs_impl.cpython-311.pyc
               getlimits.cpython-311.pyc
               _ndarray.cpython-311.pyc
               normalizations.cpython-311.pyc
               _reductions_impl.cpython-311.pyc
               _ufuncs.cpython-311.pyc
               _unary_ufuncs_impl.cpython-311.pyc
               util.cpython-311.pyc
                __init__.cpython-311.pyc
   +---_prims
           context.py
           debug_prims.py
           executor.py
           rng_prims.py
           __init__.py
       \---_pycache__
               context.cpython-311.pyc
               debug_prims.cpython-311.pyc
               executor.cpython-311.pyc
               rng_prims.cpython-311.pyc
               __init__.cpython-311.pyc
| +---_prims_common
```

```
| | | wrappers.py
    wrappers.cpython-311.pyc
           __init__.cpython-311.pyc
    1 1
    | +---_refs
    | | fft.py
    | | _conversions.py
    | | +---linalg
    | | __init__.cpython-311.pyc
    | | +---nn
    | | +---functional
    | | __init__.cpython-311.pyc
    | | +---special
    __init__.cpython-311.pyc
    1 1 1
fft.cpython-311.pyc
_conversions.cpython-311.pyc
           __init__.cpython-311.pyc
1
    | +---_strobelight
    | | cli_function_profiler.py
    | | compile_time_profiler.py
    1 1 1
cli_function_profiler.cpython-311.pyc
    1 1
 1 1
           compile time profiler.cpython-311.pyc
    1 1
           __init__.cpython-311.pyc
 | |
```

```
| +---_subclasses
1 1 1
           fake_impls.py
           fake_tensor.py
           fake utils.py
           functional_tensor.py
           meta utils.py
           schema_check_mode.py
           fake tensor utils.py
           __init__.py
      \---_pycache__
               fake_impls.cpython-311.pyc
               fake tensor.cpython-311.pyc
               fake_utils.cpython-311.pyc
               functional tensor.cpython-311.pyc
               meta_utils.cpython-311.pyc
               schema_check_mode.cpython-311.pyc
               _fake_tensor_utils.cpython-311.pyc
               __init__.cpython-311.pyc
| +--- vendor
| +---packaging
      | | version.py
              _structures.py
       \---__pycache__
                  version.cpython-311.pyc
                  _structures.cpython-311.pyc
                  __init__.cpython-311.pyc
      \---__pycache__
               __init__.cpython-311.pyc
   \---_pycache__
           functional.cpython-311.pyc
           hub.cpython-311.pyc
           library.cpython-311.pyc
           overrides.cpython-311.pyc
           quasirandom.cpython-311.pyc
           random.cpython-311.pyc
           return_types.cpython-311.pyc
           serialization.cpython-311.pyc
           storage.cpython-311.pyc
           torch_version.cpython-311.pyc
           types.cpython-311.pyc
           version.cpython-311.pyc
           _appdirs.cpython-311.pyc
           classes.cpython-311.pyc
```

```
_compile.cpython-311.pyc
            _custom_ops.cpython-311.pyc
            _deploy.cpython-311.pyc
            _environment.cpython-311.pyc
            _guards.cpython-311.pyc
            _jit_internal.cpython-311.pyc
            _linalg_utils.cpython-311.pyc
            lobpcg.cpython-311.pyc
            _lowrank.cpython-311.pyc
            _meta_registrations.cpython-311.pyc
            _namedtensor_internals.cpython-311.pyc
            _ops.cpython-311.pyc
            _python_dispatcher.cpython-311.pyc
            _size_docs.cpython-311.pyc
            sources.cpython-311.pyc
            _storage_docs.cpython-311.pyc
            _streambase.cpython-311.pyc
            _tensor.cpython-311.pyc
            _tensor_docs.cpython-311.pyc
            _tensor_str.cpython-311.pyc
            _thread_safe_fork.cpython-311.pyc
            _torch_docs.cpython-311.pyc
            utils.cpython-311.pyc
            _utils_internal.cpython-311.pyc
            VF.cpython-311.pyc
            _vmap_internals.cpython-311.pyc
            _weights_only_unpickler.cpython-311.pyc
            __config__.cpython-311.pyc
            __future__.cpython-311.pyc
            __init__.cpython-311.pyc
+---torch-2.6.0+cpu.dist-info
        entry_points.txt
        INSTALLER
        LICENSE
        METADATA
        NOTICE
        RECORD
        REQUESTED
        top level.txt
        WHEEL
+---torchaudio
        kaldi_io.py
        version.py
        __init__.py
   +---backend
-
           common.py
           no_backend.py
            soundfile_backend.py
```

```
sox_io_backend.py
        _no_backend.py
        _sox_io_backend.py
        __init__.py
   \---__pycache__
            common.cpython-311.pyc
            no_backend.cpython-311.pyc
            soundfile_backend.cpython-311.pyc
            sox_io_backend.cpython-311.pyc
            _no_backend.cpython-311.pyc
            _sox_io_backend.cpython-311.pyc
            __init__.cpython-311.pyc
+---compliance
      kaldi.py
        __init__.py
    \---__pycache__
            kaldi.cpython-311.pyc
            __init__.cpython-311.pyc
+---datasets
1 1
       cmuarctic.py
        cmudict.py
        commonvoice.py
        dr_vctk.py
        fluentcommands.py
        gtzan.py
        iemocap.py
        librilight_limited.py
        librimix.py
        librispeech.py
        librispeech_biasing.py
        libritts.py
        ljspeech.py
        musdb_hq.py
        quesst14.py
        snips.py
        speechcommands.py
        tedlium.py
        utils.py
        vctk.py
        voxceleb1.py
        yesno.py
        __init__.py
    1
    \---_pycache__
            cmuarctic.cpython-311.pyc
            cmudict.cpython-311.pyc
            commonvoice.cpython-311.pyc
```

```
dr_vctk.cpython-311.pyc
                fluentcommands.cpython-311.pyc
               gtzan.cpython-311.pyc
                iemocap.cpython-311.pyc
               librilight_limited.cpython-311.pyc
                librimix.cpython-311.pyc
                librispeech.cpython-311.pyc
                librispeech_biasing.cpython-311.pyc
                libritts.cpython-311.pyc
                ljspeech.cpython-311.pyc
                musdb_hq.cpython-311.pyc
                quesst14.cpython-311.pyc
                snips.cpython-311.pyc
                speechcommands.cpython-311.pyc
                tedlium.cpython-311.pyc
               utils.cpython-311.pyc
               vctk.cpython-311.pyc
               voxceleb1.cpython-311.pyc
               yesno.cpython-311.pyc
                __init__.cpython-311.pyc
   +---functional
           filtering.py
           functional.py
           _alignment.py
            __init__.py
       \---_pycache__
               filtering.cpython-311.pyc
               functional.cpython-311.pyc
               _alignment.cpython-311.pyc
               __init__.cpython-311.pyc
| | _effector.py
          playback.py
            __init__.py
       \---_pycache__
               effector.cpython-311.pyc
               _playback.cpython-311.pyc
               __init__.cpython-311.pyc
   +---lib
      | libtorchaudio.pyd
      | _torchaudio.pyd
          __init__.py
      \---_pycache__
               __init__.cpython-311.pyc
1 1
```

```
| +---models
        | | conformer.py
        | | conv_tasnet.py
deepspeech.py
            | emformer.py
               rnnt.py
               rnnt_decoder.py
             | tacotron2.py
               wav2letter.py
                wavernn.py
                _hdemucs.py
                __init__.py
            +---decoder
             | | _ctc_decoder.py
             | | _cuda_ctc_decoder.py
             Ī
             | \---__pycache__
1
                     _ctc_decoder.cpython-311.pyc
                      _cuda_ctc_decoder.cpython-311.pyc
__init__.cpython-311.pyc
        | | objective.py
             | | subjective.py
             1
             | \---_pycache__
                     objective.cpython-311.pyc
                     subjective.cpython-311.pyc
                      __init__.cpython-311.pyc
             +---wav2vec2
        | | components.py
             | | model.py
1
             | | wavlm_attention.py
             1
            | +---utils
            | | import_fairseq.py
1
               | | import_huggingface.py
            1
             | \---_pycache_
                        import_fairseq.cpython-311.pyc
Ī
                        import_huggingface.cpython-311.pyc
                         __init__.cpython-311.pyc
        1
        components.cpython-311.pyc
```

```
model.cpython-311.pyc
                wavlm attention.cpython-311.pyc
                __init__.cpython-311.pyc
     \---_pycache__
             conformer.cpython-311.pyc
             conv_tasnet.cpython-311.pyc
             deepspeech.cpython-311.pyc
             emformer.cpython-311.pyc
             rnnt.cpython-311.pyc
             rnnt decoder.cpython-311.pyc
             tacotron2.cpython-311.pyc
             wav2letter.cpython-311.pyc
             wavernn.cpython-311.pyc
             hdemucs.cpython-311.pyc
             __init__.cpython-311.pyc
+---pipelines
    | rnnt_pipeline.py
        _source_separation_pipeline.py
       squim pipeline.py
         __init__.py
| +---_tts
    | | impl.py
     | | interface.py
     | utils.py
           init .py
       \---_pycache__
                impl.cpython-311.pyc
                interface.cpython-311.pyc
                utils.cpython-311.pyc
                __init__.cpython-311.pyc
    +--- wav2vec2
    | | aligner.py
     | | impl.py
           utils.py
            init .py
       - 1
        \---__pycache__
                aligner.cpython-311.pyc
                impl.cpython-311.pyc
                utils.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            rnnt pipeline.cpython-311.pyc
            _source_separation_pipeline.cpython-311.pyc
             squim pipeline.cpython-311.pyc
```

```
__init__.cpython-311.pyc
       | +---prototype
        1 1 1
             +---datasets
           | | musan.py
              | \---_pycache_
                      musan.cpython-311.pyc
                       __init__.cpython-311.pyc
          | +---functional
             | | functional.py
             | | _dsp.py
Ī
              | | _rir.py
                | __init__.py
              | \---__pycache__
                       functional.cpython-311.pyc
                       _dsp.cpython-311.pyc
                       _rir.cpython-311.pyc
                       __init__.cpython-311.pyc
             +---models
             | | conv_emformer.py
             | | hifi_gan.py
              | | rnnt.py
              | | rnnt decoder.py
                conformer_wav2vec2.py
              | | _emformer_hubert.py
              | \---_pycache__
                       conv_emformer.cpython-311.pyc
                       hifi_gan.cpython-311.pyc
                       rnnt.cpython-311.pyc
                       rnnt_decoder.cpython-311.pyc
                       conformer wav2vec2.cpython-311.pyc
                       _emformer_hubert.cpython-311.pyc
                       __init__.cpython-311.pyc
             +---pipelines
             | | hifigan pipeline.py
             | rnnt_pipeline.py
Ī
              | | __init__.py
             1 1
        | | | | _vggish_impl.py
       | | | | _vggish_pipeline.py
```

```
_vggish_impl.cpython-311.pyc
           _vggish_pipeline.cpython-311.pyc
                       __init__.cpython-311.pyc
       hifigan_pipeline.cpython-311.pyc
                    rnnt_pipeline.cpython-311.pyc
                    __init__.cpython-311.pyc
       | +---transforms
         | | _transforms.py
           _transforms.cpython-311.pyc
                    __init__.cpython-311.pyc
       | \---_pycache__
       __init__.cpython-311.pyc
       | +---sox_effects
       | | sox_effects.py
       1 1 1
         | \---__pycache__
                sox_effects.cpython-311.pyc
                  __init__.cpython-311.pyc
       | +---transforms
       | | _multi_channel.py
           | _transforms.py
       | \---_pycache__
                 multi channel.cpython-311.pyc
                 _transforms.cpython-311.pyc
                  __init__.cpython-311.pyc
       | +---utils
       | | download.py
       | | ffmpeg_utils.py
           | sox utils.py
       I
       1 1 1
       1 1
                 download.cpython-311.pyc
  | |
                 ffmpeg_utils.cpython-311.pyc
      1 1
                 sox utils.cpython-311.pyc
```

```
__init__.cpython-311.pyc
| +---_backend
      backend.py
 | | common.py
          ffmpeg.py
           soundfile.py
         soundfile backend.py
         sox.py
         utils.py
           __init__.py
      \--- pycache
              backend.cpython-311.pyc
              common.cpython-311.pyc
              ffmpeg.cpython-311.pyc
              soundfile.cpython-311.pyc
              soundfile_backend.cpython-311.pyc
              sox.cpython-311.pyc
              utils.cpython-311.pyc
              __init__.cpython-311.pyc
  +--- extension
| | utils.py
      | init .py
      \---__pycache__
             utils.cpython-311.pyc
              __init__.cpython-311.pyc
   +---_internal
| | module_utils.py
      | __init__.py
      \---_pycache__
             module utils.cpython-311.pyc
              __init__.cpython-311.pyc
   \---__pycache__
         kaldi io.cpython-311.pyc
          version.cpython-311.pyc
           __init__.cpython-311.pyc
+---torchaudio-2.6.0+cpu.dist-info
       INSTALLER
       LICENSE
       METADATA
       RECORD
       REQUESTED
       top_level.txt
       WHEEL
```

```
+---torchgen
          code_template.py
                  context.py
          gen.py
                  gen_aoti_c_shim.py
                  gen_backend_stubs.py
                  gen executorch.py
                  gen_functionalization_type.py
                  gen_lazy_tensor.py
          1
                  gen_schema_utils.py
                  gen_vmap_plumbing.py
          1
                  local.py
                  model.py
                  native function generation.py
                  utils.py
                  yaml_utils.py
                  __init__.py
              -
          +---aoti
            | | fallback_ops.py
                | __init__.py
              \---__pycache__
                        fallback ops.cpython-311.pyc
                         __init__.cpython-311.pyc
              +---api
                     autograd.py
                 - 1
                     cpp.py
                     dispatcher.py
                     functionalization.py
                     lazy.py
                     meta.py
                     native.py
                     python.py
                     structured.py
                     translate.py
                     ufunc.py
                     unboxing.py
                     __init__.py
                 +---types
                 | | signatures.py
                        types.py
                  | types_base.py
Ī
                 __init__.py
                 1 1
                | \---__pycache__
          1 1
                signatures.cpython-311.pyc
                            types.cpython-311.pyc
```

```
types_base.cpython-311.pyc
                  __init__.cpython-311.pyc
       \---_pycache_
              autograd.cpython-311.pyc
              cpp.cpython-311.pyc
              dispatcher.cpython-311.pyc
              functionalization.cpython-311.pyc
              lazy.cpython-311.pyc
              meta.cpython-311.pyc
              native.cpython-311.pyc
              python.cpython-311.pyc
              structured.cpython-311.pyc
              translate.cpython-311.pyc
              ufunc.cpython-311.pyc
              unboxing.cpython-311.pyc
              __init__.cpython-311.pyc
   +---dest
      lazy_ir.py
          lazy_ts_lowering.py
          native_functions.py
          register dispatch key.py
          ufunc.py
           init .py
       \---_pycache__
              lazy_ir.cpython-311.pyc
              lazy_ts_lowering.cpython-311.pyc
              native functions.cpython-311.pyc
              register_dispatch_key.cpython-311.pyc
              ufunc.cpython-311.pyc
              __init__.cpython-311.pyc
   +---executorch
         model.py
          parse.py
           __init__.py
      +---api
      | custom_ops.py
              et_cpp.py
              unboxing.py
              __init__.py
      | +---types
         | | signatures.py
         | | types.py
      1 1 1
                  __init__.py
```

```
signatures.cpython-311.pyc
                    types.cpython-311.pyc
                    __init__.cpython-311.pyc
       \---__pycache__
                custom ops.cpython-311.pyc
                et_cpp.cpython-311.pyc
                unboxing.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            model.cpython-311.pyc
            parse.cpython-311.pyc
            __init__.cpython-311.pyc
+---operator_versions
       gen_mobile_upgraders.py
       gen_mobile_upgraders_constant.py
        __init__.py
   \---_pycache_
            gen_mobile_upgraders.cpython-311.pyc
            gen mobile upgraders constant.cpython-311.pyc
            __init__.cpython-311.pyc
+---packaged
   +---ATen
       +---native
               native_functions.yaml
                tags.yaml
        \---templates
                ATenOpList.cpp
                aten interned strings.h
                CompositeViewCopyKernels.cpp
                DispatchKeyFunction.h
                DispatchKeyFunctions.h
                DispatchKeyFunctions inl.h
                DispatchKeyNativeFunctions.cpp
                DispatchKeyNativeFunctions.h
                enum_tag.h
                Function.h
                FunctionalInverses.h
                Functions.cpp
                Functions.h
                LazyIr.h
                LazyNonNativeIr.h
                MethodOperators.h
                NativeFunction.h
                NativeFunctions.h
                NativeMetaFunction.h
```

```
NativeMetaFunctions.h
            Operator.h
            Operators.cpp
            Operators.h
            RedispatchFunctions.cpp
            RedispatchFunctions.h
            RegisterBackendSelect.cpp
            RegisterCodegenUnboxedKernels.cpp
            RegisterDispatchDefinitions.ini
            RegisterDispatchKey.cpp
            RegisterFunctionalization.cpp
            RegisterSchema.cpp
            RegistrationDeclarations.h
            TensorBody.h
            TensorMethods.cpp
            UfuncCPU.cpp
            UfuncCPUKernel.cpp
            UfuncCUDA.cu
            UnboxingFunctions.cpp
            UnboxingFunctions.h
\---autograd
       BUILD.bazel
       build.bzl
        context.py
        deprecated.yaml
        derivatives.yaml
        gen annotated fn args.py
        gen_autograd.py
        gen autograd functions.py
        gen_inplace_or_view_type.py
        gen_python_functions.py
        gen_trace_type.py
        gen_variable_factories.py
        gen_variable_type.py
        gen_view_funcs.py
        load_derivatives.py
        README.md
        __init__.py
    |
    +---templates
            ADInplaceOrViewType.cpp
            annotated_fn_args.py.in
            Functions.cpp
            Functions.h
            python_enum_tag.cpp
            python_fft_functions.cpp
            python_functions.cpp
    python functions.h
            python_linalg_functions.cpp
            python nested functions.cpp
```

```
python_nn_functions.cpp
                python_return_types.cpp
                python_return_types.h
                python sparse functions.cpp
                python_special_functions.cpp
                python torch functions.cpp
                python_variable_methods.cpp
                TraceType.cpp
                VariableType.cpp
                VariableType.h
                variable_factories.h
                ViewFuncs.cpp
                ViewFuncs.h
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                gen_annotated_fn_args.cpython-311.pyc
                gen_autograd.cpython-311.pyc
                gen_autograd_functions.cpython-311.pyc
                gen_inplace_or_view_type.cpython-311.pyc
                gen python functions.cpython-311.pyc
                gen_trace_type.cpython-311.pyc
                gen variable factories.cpython-311.pyc
                gen_variable_type.cpython-311.pyc
                gen view funcs.cpython-311.pyc
                load_derivatives.cpython-311.pyc
                __init__.cpython-311.pyc
+---selective_build
       operator.py
        selector.py
        __init__.py
    \---_pycache__
            operator.cpython-311.pyc
            selector.cpython-311.pyc
            __init__.cpython-311.pyc
+---static_runtime
        generator.py
        gen_static_runtime_ops.py
        __init__.py
    \---_pycache_
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            generator.cpython-311.pyc
            gen_static_runtime_ops.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache_
```

```
code_template.cpython-311.pyc
            context.cpython-311.pyc
            gen.cpython-311.pyc
            gen aoti c shim.cpython-311.pyc
            gen_backend_stubs.cpython-311.pyc
            gen executorch.cpython-311.pyc
            gen_functionalization_type.cpython-311.pyc
            gen_lazy_tensor.cpython-311.pyc
            gen_schema_utils.cpython-311.pyc
            gen_vmap_plumbing.cpython-311.pyc
            local.cpython-311.pyc
            model.cpython-311.pyc
            native function generation.cpython-311.pyc
            utils.cpython-311.pyc
            yaml utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---torchvision
        extension.py
        image.pyd
        jpeg8.dll
        libjpeg.dll
        libpng16.dll
        libsharpyuv.dll
ı
        libwebp.dll
        utils.py
        version.py
        zlib.dll
        _C.pyd
        internally replaced utils.py
        _meta_registrations.py
        utils.py
        __init__.py
    +---datasets
            caltech.py
            celeba.py
            cifar.py
            cityscapes.py
            clevr.py
            coco.py
            country211.py
            dtd.py
            eurosat.py
            fakedata.py
            fer2013.py
            fgvc_aircraft.py
            flickr.py
            flowers102.py
            folder.py
            food101.py
```

```
gtsrb.py
      hmdb51.py
            imagenet.py
            imagenette.py
            inaturalist.py
            kinetics.py
            kitti.py
            lfw.py
            lsun.py
            mnist.py
           moving_mnist.py
            omniglot.py
            oxford iiit pet.py
            pcam.py
            phototour.py
           places365.py
            rendered_sst2.py
            sbd.py
            sbu.py
            semeion.py
            stanford cars.py
            stl10.py
            sun397.py
            svhn.py
            ucf101.py
            usps.py
            utils.py
           video_utils.py
           vision.py
           voc.py
           widerface.py
            _optical_flow.py
            _stereo_matching.py
            __init__.py
        +---samplers
              clip_sampler.py
               __init__.py
           \--- pycache
                   clip_sampler.cpython-311.pyc
                    __init__.cpython-311.pyc
        \---_pycache__
                caltech.cpython-311.pyc
                celeba.cpython-311.pyc
                cifar.cpython-311.pyc
                cityscapes.cpython-311.pyc
clevr.cpython-311.pyc
                coco.cpython-311.pyc
                country211.cpython-311.pyc
```

```
dtd.cpython-311.pyc
            eurosat.cpython-311.pyc
            fakedata.cpython-311.pyc
            fer2013.cpython-311.pyc
            fgvc_aircraft.cpython-311.pyc
            flickr.cpython-311.pyc
            flowers102.cpython-311.pyc
            folder.cpython-311.pyc
            food101.cpython-311.pyc
            gtsrb.cpython-311.pyc
            hmdb51.cpython-311.pyc
            imagenet.cpython-311.pyc
            imagenette.cpython-311.pyc
            inaturalist.cpython-311.pyc
            kinetics.cpython-311.pyc
            kitti.cpython-311.pyc
            lfw.cpython-311.pyc
            lsun.cpython-311.pyc
            mnist.cpython-311.pyc
            moving_mnist.cpython-311.pyc
            omniglot.cpython-311.pyc
            oxford_iiit_pet.cpython-311.pyc
            pcam.cpython-311.pyc
            phototour.cpython-311.pyc
            places365.cpython-311.pyc
            rendered sst2.cpython-311.pyc
            sbd.cpython-311.pyc
            sbu.cpython-311.pyc
            semeion.cpython-311.pyc
            stanford cars.cpython-311.pyc
            stl10.cpython-311.pyc
            sun397.cpython-311.pyc
            svhn.cpython-311.pyc
            ucf101.cpython-311.pyc
            usps.cpython-311.pyc
            utils.cpython-311.pyc
            video_utils.cpython-311.pyc
            vision.cpython-311.pyc
            voc.cpython-311.pyc
            widerface.cpython-311.pyc
            _optical_flow.cpython-311.pyc
            _stereo_matching.cpython-311.pyc
            __init__.cpython-311.pyc
+---io
        image.py
        video.py
        video_reader.py
        _load_gpu_decoder.py
        _video_opt.py
        __init__.py
```

```
\---_pycache_
           image.cpython-311.pyc
           video.cpython-311.pyc
           video_reader.cpython-311.pyc
           _load_gpu_decoder.cpython-311.pyc
            _video_opt.cpython-311.pyc
            __init__.cpython-311.pyc
+---models
       alexnet.py
       convnext.py
       densenet.py
       efficientnet.py
       feature extraction.py
       googlenet.py
       inception.py
       maxvit.py
       mnasnet.py
       mobilenet.py
       mobilenetv2.py
       mobilenetv3.py
        regnet.py
       resnet.py
       shufflenetv2.py
       squeezenet.py
       swin_transformer.py
       vgg.py
       vision_transformer.py
       api.py
       _meta.py
       _utils.py
       __init__.py
   +---detection
           anchor_utils.py
           backbone_utils.py
            faster rcnn.py
           fcos.py
           generalized rcnn.py
           image_list.py
           keypoint_rcnn.py
           mask_rcnn.py
           retinanet.py
           roi heads.py
           rpn.py
           ssd.py
           ssdlite.py
           transform.py
           _utils.py
```

\_\_init\_\_.py

```
\--- pycache
            anchor_utils.cpython-311.pyc
            backbone utils.cpython-311.pyc
            faster_rcnn.cpython-311.pyc
            fcos.cpython-311.pyc
            generalized_rcnn.cpython-311.pyc
            image_list.cpython-311.pyc
            keypoint_rcnn.cpython-311.pyc
            mask_rcnn.cpython-311.pyc
            retinanet.cpython-311.pyc
            roi_heads.cpython-311.pyc
            rpn.cpython-311.pyc
            ssd.cpython-311.pyc
            ssdlite.cpython-311.pyc
            transform.cpython-311.pyc
            _utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---optical_flow
       raft.py
       _utils.py
       init .py
   \---_pycache_
           raft.cpython-311.pyc
            _utils.cpython-311.pyc
            init .cpython-311.pyc
+---quantization
       googlenet.py
        inception.py
       mobilenet.py
       mobilenetv2.py
       mobilenetv3.py
        resnet.py
       shufflenetv2.py
       utils.py
       __init__.py
   \---__pycache__
            googlenet.cpython-311.pyc
            inception.cpython-311.pyc
            mobilenet.cpython-311.pyc
            mobilenetv2.cpython-311.pyc
           mobilenetv3.cpython-311.pyc
            resnet.cpython-311.pyc
            shufflenetv2.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
```

```
+---segmentation
       deeplabv3.py
       fcn.py
       lraspp.py
        _utils.py
        init .py
    \---_pycache_
            deeplabv3.cpython-311.pyc
            fcn.cpython-311.pyc
            lraspp.cpython-311.pyc
            _utils.cpython-311.pyc
            init .cpython-311.pyc
+---video
| | mvit.py
       resnet.py
       s3d.py
       swin transformer.py
       __init__.py
    \---_pycache__
            mvit.cpython-311.pyc
            resnet.cpython-311.pyc
            s3d.cpython-311.pyc
            swin transformer.cpython-311.pyc
            __init__.cpython-311.pyc
\---_pycache__
       alexnet.cpython-311.pyc
        convnext.cpython-311.pyc
        densenet.cpython-311.pyc
       efficientnet.cpython-311.pyc
        feature extraction.cpython-311.pyc
       googlenet.cpython-311.pyc
        inception.cpython-311.pyc
       maxvit.cpython-311.pyc
        mnasnet.cpython-311.pyc
       mobilenet.cpython-311.pyc
        mobilenetv2.cpython-311.pyc
        mobilenetv3.cpython-311.pyc
        regnet.cpython-311.pyc
        resnet.cpython-311.pyc
        shufflenetv2.cpython-311.pyc
        squeezenet.cpython-311.pyc
        swin_transformer.cpython-311.pyc
        vgg.cpython-311.pyc
       vision_transformer.cpython-311.pyc
        _api.cpython-311.pyc
        _meta.cpython-311.pyc
        utils.cpython-311.pyc
```

```
__init__.cpython-311.pyc
+---ops
        boxes.py
ciou_loss.py
        deform_conv.py
        diou_loss.py
        drop block.py
        feature_pyramid_network.py
        focal_loss.py
        giou_loss.py
        misc.py
        poolers.py
        ps_roi_align.py
        ps roi pool.py
        roi_align.py
        roi_pool.py
        stochastic_depth.py
        _box_convert.py
        _register_onnx_ops.py
        utils.py
        __init__.py
    \---__pycache__
            boxes.cpython-311.pyc
            ciou loss.cpython-311.pyc
            deform_conv.cpython-311.pyc
            diou loss.cpython-311.pyc
            drop_block.cpython-311.pyc
            feature pyramid network.cpython-311.pyc
            focal_loss.cpython-311.pyc
            giou_loss.cpython-311.pyc
            misc.cpython-311.pyc
            poolers.cpython-311.pyc
            ps_roi_align.cpython-311.pyc
            ps_roi_pool.cpython-311.pyc
            roi_align.cpython-311.pyc
            roi pool.cpython-311.pyc
            stochastic_depth.cpython-311.pyc
            box convert.cpython-311.pyc
            _register_onnx_ops.cpython-311.pyc
            _utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---transforms
        autoaugment.py
        functional.py
        transforms.py
        _functional_pil.py
        _functional_tensor.py
        functional video.py
```

```
_presets.py
                      _transforms_video.py
                       __init__.py
+---v2
                           _augment.py
                  _auto_augment.py
                           _color.py
                           _container.py
                           _deprecated.py
                           _geometry.py
                           _meta.py
                           misc.py
                           _temporal.py
                           transform.py
                           _type_conversion.py
                           utils.py
                           __init__.py
                      +---functional
                               _augment.py
                               _color.py
                               deprecated.py
                               _geometry.py
                               _misc.py
                               _temporal.py
                               _type_conversion.py
                               _utils.py
                               __init__.py
                       1
                         - 1
                           \---_pycache_
                                   _augment.cpython-311.pyc
                                   _color.cpython-311.pyc
                                   _deprecated.cpython-311.pyc
                                   _geometry.cpython-311.pyc
                                   _meta.cpython-311.pyc
                                   _misc.cpython-311.pyc
                                   _temporal.cpython-311.pyc
                                   type conversion.cpython-311.pyc
                                   _utils.cpython-311.pyc
                                   __init__.cpython-311.pyc
                       \---__pycache__
                               _augment.cpython-311.pyc
                               _auto_augment.cpython-311.pyc
Ī
                               _color.cpython-311.pyc
                               _container.cpython-311.pyc
                               _deprecated.cpython-311.pyc
                               _geometry.cpython-311.pyc
                               meta.cpython-311.pyc
```

```
_misc.cpython-311.pyc
                   _temporal.cpython-311.pyc
                   _transform.cpython-311.pyc
                    _type_conversion.cpython-311.pyc
                    _utils.cpython-311.pyc
                    init .cpython-311.pyc
        \---_pycache_
               autoaugment.cpython-311.pyc
                functional.cpython-311.pyc
               transforms.cpython-311.pyc
                _functional_pil.cpython-311.pyc
               functional tensor.cpython-311.pyc
               _functional_video.cpython-311.pyc
                presets.cpython-311.pyc
                _transforms_video.cpython-311.pyc
                __init__.cpython-311.pyc
    +---tv tensors
           _bounding_boxes.py
           _dataset_wrapper.py
           _image.py
            mask.py
           _torch_function_helpers.py
           _tv_tensor.py
            video.py
            __init__.py
       \---__pycache__
                bounding boxes.cpython-311.pyc
                _dataset_wrapper.cpython-311.pyc
               _image.cpython-311.pyc
               _mask.cpython-311.pyc
               _torch_function_helpers.cpython-311.pyc
               _tv_tensor.cpython-311.pyc
               video.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            extension.cpython-311.pyc
           utils.cpython-311.pyc
            version.cpython-311.pyc
            _internally_replaced_utils.cpython-311.pyc
            _meta_registrations.cpython-311.pyc
            utils.cpython-311.pyc
            __init__.cpython-311.pyc
+---torchvision-0.21.0+cpu.dist-info
       INSTALLER
       LICENSE
       METADATA
```

```
RECORD
      REQUESTED
       top_level.txt
            WHEEL
 +---torio
      1 1
      | +---io
       | | streaming_media_decoder.py
       | | _streaming_media_encoder.py
       _streaming_media_decoder.cpython-311.pyc
                _streaming_media_encoder.cpython-311.pyc
                 __init__.cpython-311.pyc
I
      | +---lib
       | | libtorio_ffmpeg4.pyd
       | | libtorio ffmpeg5.pyd
       | | libtorio_ffmpeg6.pyd
| torio ffmpeg4.pyd
       | | _torio_ffmpeg5.pyd
       | | torio ffmpeg6.pyd
       | \---_pycache__
               __init__.cpython-311.pyc
       1 1
       | +---utils
      | | | ffmpeg utils.py
       1 1 1
       ffmpeg utils.cpython-311.pyc
                 __init__.cpython-311.pyc
       1 1
       | +---_extension
       | | utils.py
       1 1 1
       utils.cpython-311.pyc
                 __init__.cpython-311.pyc
       1 1
1
       | \---__pycache__
             __init__.cpython-311.pyc
  +---tqdm
      | | asyncio.py
```

```
auto.py
       autonotebook.py
       cli.py
       completion.sh
dask.py
       gui.py
        keras.py
       notebook.py
       rich.py
       std.py
       tk.py
tqdm.1
       utils.py
1
       version.py
        dist ver.py
       _main.py
       _monitor.py
       _tqdm.py
_tqdm_gui.py
_tqdm_notebook.py
_tqdm_pandas.py
       _utils.py
        __init__.py
        __main__.py
    +---contrib
           bells.py
           concurrent.py
            discord.py
           itertools.py
           logging.py
           slack.py
            telegram.py
           utils_worker.py
            __init__.py
       \---__pycache__
               bells.cpython-311.pyc
               concurrent.cpython-311.pyc
               discord.cpython-311.pyc
               itertools.cpython-311.pyc
               logging.cpython-311.pyc
               slack.cpython-311.pyc
               telegram.cpython-311.pyc
               utils worker.cpython-311.pyc
                __init__.cpython-311.pyc
   \---__pycache__
-
            asyncio.cpython-311.pyc
            auto.cpython-311.pyc
            autonotebook.cpython-311.pyc
```

```
cli.cpython-311.pyc
            dask.cpython-311.pyc
            gui.cpython-311.pyc
            keras.cpython-311.pyc
            notebook.cpython-311.pyc
            rich.cpython-311.pyc
            std.cpython-311.pyc
            tk.cpython-311.pyc
            utils.cpython-311.pyc
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            _dist_ver.cpython-311.pyc
            _main.cpython-311.pyc
            monitor.cpython-311.pyc
            _tqdm.cpython-311.pyc
            tqdm gui.cpython-311.pyc
            _tqdm_notebook.cpython-311.pyc
            _tqdm_pandas.cpython-311.pyc
            _utils.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---tqdm-4.67.1.dist-info
        entry points.txt
        INSTALLER
        LICENCE
        METADATA
        RECORD
        top level.txt
        WHEEL
+---typing_extensions-4.12.2.dist-info
|
        INSTALLER
        LICENSE
        METADATA
        RECORD
        WHEEL
+---tzdata
        zones
        init .py
    +---zoneinfo
            CET
            CST6CDT
            Cuba
            EET
            Egypt
            Eire
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       LICENSE_APACHE
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       RECORD
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       WHEEL
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           zidane.jpg
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          __init__.py
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               Argoverse.yaml
               brain-tumor.yaml
               carparts-seg.yaml
               coco-pose.yaml
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               coco128-seg.yaml
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               coco8-pose.yaml
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               coco8.yaml
               crack-seg.yaml
               dog-pose.yaml
               dota8.yaml
               DOTAv1.5.yaml
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                                yolo11.yaml
                       +---12
                                yolo12-cls.yaml
                       yolo12-obb.yaml
                                yolo12-pose.yaml
                                yolo12-seg.yaml
                                yolo12.yaml
                       +---rt-detr
                                rtdetr-l.yaml
                                rtdetr-resnet101.yaml
                                rtdetr-resnet50.yaml
                                rtdetr-x.yaml
                       +---v10
                                yolov10b.yaml
                       yolov101.yaml
                                yolov10m.yaml
                                yolov10n.yaml
                                yolov10s.yaml
                                yolov10x.yaml
                       +---v3
                       yolov3-spp.yaml
                                yolov3-tiny.yaml
                                yolov3.yaml
                       yolov5-p6.yaml
                       ı
                                yolov5.yaml
                               yolov6.yaml
```

```
yolov8-cls-resnet101.yaml
           yolov8-cls-resnet50.yaml
                   yolov8-cls.yaml
                   yolov8-ghost-p2.yaml
                   yolov8-ghost-p6.yaml
                   yolov8-ghost.yaml
                   yolov8-obb.yaml
                   yolov8-p2.yaml
                   yolov8-p6.yaml
                   yolov8-pose-p6.yaml
                   yolov8-pose.yaml
                   yolov8-rtdetr.yaml
                   yolov8-seg-p6.yaml
                   yolov8-seg.yaml
                   yolov8-world.yaml
                   yolov8-worldv2.yaml
                   yolov8.yaml
           \---v9
                   yolov9c-seg.yaml
                   yolov9c.yaml
                   yolov9e-seg.yaml
                   yolov9e.yaml
                   yolov9m.yaml
                   yolov9s.yaml
                   yolov9t.yaml
       +---solutions
               default.yaml
       +---trackers
               botsort.yaml
               bytetrack.yaml
        \---_pycache__
               __init__.cpython-311.pyc
    +---data
           annotator.py
       augment.py
           base.py
           build.py
           converter.py
           dataset.py
           loaders.py
           split_dota.py
           utils.py
\_init\_.py
       1
| | \---_pycache__
```

```
annotator.cpython-311.pyc
               augment.cpython-311.pyc
               base.cpython-311.pyc
               build.cpython-311.pyc
               converter.cpython-311.pyc
               dataset.cpython-311.pyc
               loaders.cpython-311.pyc
                split dota.cpython-311.pyc
               utils.cpython-311.pyc
                __init__.cpython-311.pyc
    +---engine
 | | exporter.py
       | model.py
            predictor.py
            results.py
           trainer.py
            tuner.py
            validator.py
            __init__.py
       - 1
       \---_pycache__
               exporter.cpython-311.pyc
               model.cpython-311.pyc
               predictor.cpython-311.pyc
               results.cpython-311.pyc
               trainer.cpython-311.pyc
               tuner.cpython-311.pyc
               validator.cpython-311.pyc
                init .cpython-311.pyc
    +---hub
 | | auth.py
           session.py
          utils.py
            __init__.py
       +---google
       | \---_pycache__
                   __init__.cpython-311.pyc
       - 1
        \---_pycache__
               auth.cpython-311.pyc
               session.cpython-311.pyc
               utils.cpython-311.pyc
                __init__.cpython-311.pyc
 | +---models
```

```
1
 +---fastsam
         | | model.py
                 | predict.py
| | utils.py
                 | val.py
                 | __init__.py
                 \---_pycache_
                         model.cpython-311.pyc
                         predict.cpython-311.pyc
                         utils.cpython-311.pyc
                        val.cpython-311.pyc
                         __init__.cpython-311.pyc
              +---nas
              | | model.py
Ī
               | | predict.py
              | | val.py
                   | __init__.py
1
              - 1
                 \---__pycache__
                         model.cpython-311.pyc
                         predict.cpython-311.pyc
                         val.cpython-311.pyc
                         __init__.cpython-311.pyc
              +---rtdetr
              | | model.py
               | | predict.py
               | | train.py
                 | val.py
                 | __init__.py
                 - 1
                 \---_pycache_
                         model.cpython-311.pyc
                         predict.cpython-311.pyc
                         train.cpython-311.pyc
                         val.cpython-311.pyc
                         init .cpython-311.pyc
              Τ
              +---sam
           | | amg.py
               | | build.py
                     model.py
               | | predict.py
Ī
                     __init__.py
              | +---modules
              | | blocks.py
```

```
| | | encoders.py
     | | memory attention.py
     | | sam.py
                tiny_encoder.py
     | | transformer.py
                __init__.py
      | \---_pycache__
                    blocks.cpython-311.pyc
                    decoders.cpython-311.pyc
                    encoders.cpython-311.pyc
                    memory attention.cpython-311.pyc
                    sam.cpython-311.pyc
                    tiny encoder.cpython-311.pyc
                    transformer.cpython-311.pyc
                    utils.cpython-311.pyc
                    __init__.cpython-311.pyc
      | \---__pycache__
                amg.cpython-311.pyc
                build.cpython-311.pyc
                model.cpython-311.pyc
                predict.cpython-311.pyc
                __init__.cpython-311.pyc
     +---utils
     | | loss.py
      | | ops.py
             __init__.py
          \---__pycache__
                loss.cpython-311.pyc
                ops.cpython-311.pyc
                __init__.cpython-311.pyc
  | +---yolo
     | | model.py
      | +---classify
        | | predict.py
      | | train.py
        | | val.py
        | \---_pycache__
                    predict.cpython-311.pyc
                    train.cpython-311.pyc
                    val.cpython-311.pyc
                    __init__.cpython-311.pyc
```

```
- 1
      | | +---detect
      | | | predict.py
          | | | train.py
| | | val.py
          1
          predict.cpython-311.pyc
                    train.cpython-311.pyc
                    val.cpython-311.pyc
                    __init__.cpython-311.pyc
          | +---obb
          | | predict.py
          | | train.py
            | | val.py
Ī
          1
          predict.cpython-311.pyc
                    train.cpython-311.pyc
1
                    val.cpython-311.pyc
                    __init__.cpython-311.pyc
          | +---pose
          | | predict.py
          | | | train.py
          predict.cpython-311.pyc
                   train.cpython-311.pyc
                   val.cpython-311.pyc
                    __init__.cpython-311.pyc
          | +---segment
          | | predict.py
          | \---_pycache__
                   predict.cpython-311.pyc
                    train.cpython-311.pyc
Ī
                   val.cpython-311.pyc
                    __init__.cpython-311.pyc
      | | +---world
```

```
| | | | train_world.py
 train.cpython-311.pyc
                    train world.cpython-311.pyc
                    __init__.cpython-311.pyc
      | \---__pycache__
               model.cpython-311.pyc
                 __init__.cpython-311.pyc
      \---_pycache__
            __init__.cpython-311.pyc
 | +---nn
 | | autobackend.py
      | tasks.py
          __init__.py
      +---modules
   | | activation.py
         | block.py
      | | conv.py
       | | head.py
      | | transformer.py
      | | utils.py
             __init__.py
      | \---_pycache_
                 activation.cpython-311.pyc
                 block.cpython-311.pyc
                 conv.cpython-311.pyc
                 head.cpython-311.pyc
                 transformer.cpython-311.pyc
                 utils.cpython-311.pyc
                 __init__.cpython-311.pyc
      \---__pycache__
             autobackend.cpython-311.pyc
             tasks.cpython-311.pyc
              __init__.cpython-311.pyc
   +---solutions
   | | ai_gym.py
    | | analytics.py
      | distance_calculation.py
      | heatmap.py
      - 1
         instance segmentation.py
      | object_blurrer.py
| | | object counter.py
```

```
object_cropper.py
       parking_management.py
        queue_management.py
        region counter.py
        security_alarm.py
        solutions.py
        speed_estimation.py
        streamlit inference.py
        trackzone.py
        vision_eye.py
        __init__.py
    \--- pycache
           ai_gym.cpython-311.pyc
            analytics.cpython-311.pyc
            distance_calculation.cpython-311.pyc
           heatmap.cpython-311.pyc
            instance_segmentation.cpython-311.pyc
            object blurrer.cpython-311.pyc
            object_counter.cpython-311.pyc
            object cropper.cpython-311.pyc
            parking_management.cpython-311.pyc
            queue management.cpython-311.pyc
            region_counter.cpython-311.pyc
            security alarm.cpython-311.pyc
            solutions.cpython-311.pyc
            speed_estimation.cpython-311.pyc
            streamlit_inference.cpython-311.pyc
            trackzone.cpython-311.pyc
            vision eye.cpython-311.pyc
            __init__.cpython-311.pyc
+---trackers
       basetrack.py
       bot_sort.py
       byte tracker.py
        track.py
        init .py
   +---utils
           gmc.py
            kalman_filter.py
           matching.py
           __init__.py
      \---__pycache__
                gmc.cpython-311.pyc
                kalman_filter.cpython-311.pyc
                matching.cpython-311.pyc
                __init__.cpython-311.pyc
```

```
\---_pycache_
           basetrack.cpython-311.pyc
           bot_sort.cpython-311.pyc
           byte_tracker.cpython-311.pyc
           track.cpython-311.pyc
           init .cpython-311.pyc
+---utils
   -
       autobatch.py
       benchmarks.py
       checks.py
       dist.py
       downloads.py
       errors.py
       files.py
       instance.py
       loss.py
       metrics.py
       ops.py
       patches.py
       plotting.py
       tal.py
       torch utils.py
       triton.py
       tuner.py
        __init__.py
   +---callbacks
           base.py
           clearml.py
           comet.py
           dvc.py
           hub.py
           mlflow.py
           neptune.py
           raytune.py
           tensorboard.py
           wb.py
           __init__.py
       \---_pycache__
               base.cpython-311.pyc
               clearml.cpython-311.pyc
               comet.cpython-311.pyc
               dvc.cpython-311.pyc
               hub.cpython-311.pyc
               mlflow.cpython-311.pyc
               neptune.cpython-311.pyc
                raytune.cpython-311.pyc
                tensorboard.cpython-311.pyc
               wb.cpython-311.pyc
```

```
__init__.cpython-311.pyc
        \---__pycache__
                autobatch.cpython-311.pyc
                benchmarks.cpython-311.pyc
                checks.cpython-311.pyc
                dist.cpython-311.pyc
                downloads.cpython-311.pyc
                errors.cpython-311.pyc
                files.cpython-311.pyc
                instance.cpython-311.pyc
                loss.cpython-311.pyc
                metrics.cpython-311.pyc
                ops.cpython-311.pyc
                patches.cpython-311.pyc
                plotting.cpython-311.pyc
                tal.cpython-311.pyc
                torch_utils.cpython-311.pyc
                triton.cpython-311.pyc
                tuner.cpython-311.pyc
                init .cpython-311.pyc
    \---_pycache__
            __init__.cpython-311.pyc
+---ultralytics-8.3.94.dist-info
        entry_points.txt
        INSTALLER
        METADATA
        RECORD
        REQUESTED
        top_level.txt
        WHEEL
    \---licenses
           LICENSE
+---ultralytics thop-2.0.14.dist-info
        INSTALLER
        LICENSE
        METADATA
        RECORD
        top_level.txt
        WHEEL
+---uritemplate
        api.py
        orderedset.py
py.typed
        template.py
        variable.py
```

```
\---_pycache__
             api.cpython-311.pyc
             orderedset.cpython-311.pyc
             template.cpython-311.pyc
             variable.cpython-311.pyc
             __init__.cpython-311.pyc
 +---uritemplate-4.1.1.dist-info
         INSTALLER
 1
         LICENSE
         METADATA
         RECORD
         top level.txt
         WHEEL
 +---urllib3
         connection.py
         connectionpool.py
         exceptions.py
         fields.py
         filepost.py
         poolmanager.py
         py.typed
         response.py
         _base_connection.py
         collections.py
         _request_methods.py
         version.py
         __init__.py
     +---contrib
            pyopenssl.py
             socks.py
             __init__.py
         +---emscripten
        | connection.py
                 emscripten fetch worker.js
                fetch.py
                 request.py
                 response.py
                 __init__.py
           \---__pycache__
                    connection.cpython-311.pyc
                     fetch.cpython-311.pyc
                     request.cpython-311.pyc
                    response.cpython-311.pyc
                     __init__.cpython-311.pyc
```

```
\---_pycache_
           pyopenssl.cpython-311.pyc
            socks.cpython-311.pyc
            __init__.cpython-311.pyc
+---http2
      connection.py
       probe.py
        __init__.py
    1
    \---__pycache__
           connection.cpython-311.pyc
           probe.cpython-311.pyc
            init .cpython-311.pyc
+---util
   connection.py
       proxy.py
        request.py
        response.py
        retry.py
        ssltransport.py
       ssl_.py
       ssl_match_hostname.py
       timeout.py
       url.py
       util.py
        wait.py
        __init__.py
    \---__pycache__
            connection.cpython-311.pyc
            proxy.cpython-311.pyc
            request.cpython-311.pyc
            response.cpython-311.pyc
            retry.cpython-311.pyc
            ssltransport.cpython-311.pyc
            ssl_.cpython-311.pyc
            ssl match hostname.cpython-311.pyc
            timeout.cpython-311.pyc
            url.cpython-311.pyc
            util.cpython-311.pyc
            wait.cpython-311.pyc
            __init__.cpython-311.pyc
\---__pycache__
        connection.cpython-311.pyc
        connectionpool.cpython-311.pyc
        exceptions.cpython-311.pyc
        fields.cpython-311.pyc
```

```
filepost.cpython-311.pyc
                       poolmanager.cpython-311.pyc
                       response.cpython-311.pyc
                       _base_connection.cpython-311.pyc
                       _collections.cpython-311.pyc
                       _request_methods.cpython-311.pyc
                       _version.cpython-311.pyc
                       __init__.cpython-311.pyc
           +---urllib3-2.3.0.dist-info
                  INSTALLER
                   METADATA
                   RECORD
                   WHEEL
               \---licenses
                      LICENSE.txt
           +---uvicorn
           config.py
                   importer.py
                   logging.py
                   main.py
                   py.typed
                   server.py
                   workers.py
                   _subprocess.py
                  _types.py
                   __init__.py
                   __main__.py
               +---lifespan
                     off.py
                      on.py
                       __init__.py
                  \---__pycache__
                          off.cpython-311.pyc
                          on.cpython-311.pyc
                           init .cpython-311.pyc
               +---loops
              | | asyncio.py
                      auto.py
                      uvloop.py
                       __init__.py
Ī
                  \---__pycache__
                           asyncio.cpython-311.pyc
                          auto.cpython-311.pyc
                          uvloop.cpython-311.pyc
```

```
__init__.cpython-311.pyc
| +---middleware
      | asgi2.py
   | message_logger.py
      | proxy_headers.py
          wsgi.py
          __init__.py
      \---_pycache_
              asgi2.cpython-311.pyc
              message_logger.cpython-311.pyc
              proxy headers.cpython-311.pyc
              wsgi.cpython-311.pyc
              __init__.cpython-311.pyc
  +---protocols
  | | utils.py
      | __init__.py
   | +---http
      | | auto.py
         | flow control.py
      | h11_impl.py
         | httptools impl.py
              __init__.py
      1 1
      | \---__pycache__
                  auto.cpython-311.pyc
                  flow control.cpython-311.pyc
                 h11_impl.cpython-311.pyc
                 httptools_impl.cpython-311.pyc
                  __init__.cpython-311.pyc
      +---websockets
      | | auto.py
       | websockets_impl.py
          | wsproto impl.py
             __init__.py
         \---__pycache__
                  auto.cpython-311.pyc
                  websockets_impl.cpython-311.pyc
                  wsproto_impl.cpython-311.pyc
                  __init__.cpython-311.pyc
      \---_pycache__
             utils.cpython-311.pyc
              __init__.cpython-311.pyc
| +---supervisors
```

```
basereload.py
           multiprocess.py
           statreload.py
            watchfilesreload.py
            __init__.py
       \---__pycache__
               basereload.cpython-311.pyc
               multiprocess.cpython-311.pyc
               statreload.cpython-311.pyc
               watchfilesreload.cpython-311.pyc
                __init__.cpython-311.pyc
    \---_pycache__
            config.cpython-311.pyc
            importer.cpython-311.pyc
            logging.cpython-311.pyc
           main.cpython-311.pyc
            server.cpython-311.pyc
           workers.cpython-311.pyc
            subprocess.cpython-311.pyc
            _types.cpython-311.pyc
            __init__.cpython-311.pyc
            __main__.cpython-311.pyc
+---uvicorn-0.34.0.dist-info
       entry_points.txt
       INSTALLER
       METADATA
       RECORD
       REQUESTED
        WHEEL
-
    \---licenses
           LICENSE.md
+---yaml
       composer.py
       constructor.py
       cyaml.py
       dumper.py
       emitter.py
       error.py
       events.py
       loader.py
       nodes.py
parser.py
        reader.py
representer.py
        resolver.py
scanner.py
```

```
serializer.py
               tokens.py
               _yaml.cp311-win_amd64.pyd
                __init__.py
            \---__pycache__
                   composer.cpython-311.pyc
                    constructor.cpython-311.pyc
                    cyaml.cpython-311.pyc
                    dumper.cpython-311.pyc
                    emitter.cpython-311.pyc
                    error.cpython-311.pyc
                    events.cpython-311.pyc
                    loader.cpython-311.pyc
                    nodes.cpython-311.pyc
                    parser.cpython-311.pyc
                    reader.cpython-311.pyc
                    representer.cpython-311.pyc
                    resolver.cpython-311.pyc
                    scanner.cpython-311.pyc
                    serializer.cpython-311.pyc
                    tokens.cpython-311.pyc
                    init .cpython-311.pyc
        +---_distutils_hack
              override.py
               __init__.py
           \---__pycache__
                   override.cpython-311.pyc
                    __init__.cpython-311.pyc
       +---_yaml
          | __init__.py
            \---_pycache__
                    __init__.cpython-311.pyc
       \---_pycache__
               google auth httplib2.cpython-311.pyc
               isympy.cpython-311.pyc
               pylab.cpython-311.pyc
               six.cpython-311.pyc
               typing_extensions.cpython-311.pyc
+---Scripts
       activate
       activate.bat
       Activate.ps1
       cpuinfo.exe
       deactivate.bat
```

```
distro.exe
            dotenv.exe
            f2py.exe
            fastapi.exe
            fonttools.exe
            httpx.exe
            isympy.exe
            normalizer.exe
            numpy-config.exe
            openai.exe
            pip.exe
            pip3.11.exe
            pip3.exe
            pyftmerge.exe
            pyftsubset.exe
            pyrsa-decrypt.exe
            pyrsa-encrypt.exe
            pyrsa-keygen.exe
            pyrsa-priv2pub.exe
            pyrsa-sign.exe
            pyrsa-verify.exe
            python.exe
            pythonw.exe
            pythonw_d.exe
            python_d.exe
            torchfrtrace.exe
            torchrun.exe
            tqdm.exe
            ttx.exe
            ultralytics.exe
            uvicorn.exe
            yolo.exe
   \---share
       \---man
            \---man1
                    isympy.1
                    ttx.1
\---_pycache__
       main.cpython-311.pyc
       main_without_predict.cpython-311.pyc
```