

day-3

October 4, 2024

```
[95]: #print  
print("Hello python")
```

Hello python

```
[96]: a=input("enter the name")  
print(a)
```

enter the nameDr. Safdar sardar khan
Dr. Safdar sardar khan

```
[98]: a=False  
type(a)
```

[98]: bool

```
[99]: int("10")
```

[99]: 10

```
[100]: int(5.4)
```

[100]: 5

```
[102]: abs(-4)
```

[102]: 4

```
[103]: pow(2,4)
```

[103]: 16

```
[104]: pow(2,-3)
```

[104]: 0.125

```
[105]: min([2,3,7,11,10])
```

[105]: 2

```
[106]: max([2,3,7,1,10])
```

[106]: 10

```
[25]: min((2,3,7,1,10))
```

[25]: 1

```
[108]: max((2,3,7,1,10))
```

[108]: 10

```
[109]: max("kolkata")
```

[109]: 't'

```
[110]: min("kolkata")
```

[110]: 'a'

```
[111]: c=22/7  
c
```

[111]: 3.142857142857143

```
[112]: round(22/7)
```

[112]: 3

```
[113]: round(c,5)
```

[113]: 3.14286

```
[114]: divmod(5,2)
```

[114]: (2, 1)

```
[115]: bin(4)
```

[115]: '0b100'

```
[116]: oct(4)
```

[116]: '0o4'

```
[117]: hex(12)
```

```
[117]: '0xc'
```

```
[118]: a=3  
       id(a)
```

```
[118]: 2668875114864
```

```
[120]: ord('a')
```

```
[120]: 97
```

```
[121]: ord('$')
```

```
[121]: 36
```

```
[122]: len("kolkata")
```

```
[122]: 7
```

```
[123]: len([2,5,6,700,4.5,True])
```

```
[123]: 6
```

```
[127]: sum([1,2,3,4,5.5,True,False])
```

```
[127]: 16.5
```

```
[128]: help("print")
```

Help on built-in function print in module builtins:

```
print(...)
```

```
    print(value, ..., sep=' ', end='\n', file=sys.stdout, flush=False)
```

Prints the values to a stream, or to sys.stdout by default.

Optional keyword arguments:

file: a file-like object (stream); defaults to the current sys.stdout.

sep: string inserted between values, default a space.

end: string appended after the last value, default a newline.

flush: whether to forcibly flush the stream.

```
[129]: help("sum")
```

Help on built-in function sum in module builtins:

```
sum(iterable, /, start=0)
    Return the sum of a 'start' value (default: 0) plus an iterable of numbers

    When the iterable is empty, return the start value.
    This function is intended specifically for use with numeric values and may
    reject non-numeric types.
```

```
[35]: help('modules')
```

Please wait a moment while I gather a list of all available modules...

```
C:\Users\new\anaconda3\lib\site-packages\IPython\kernel\__init__.py:12:
ShimWarning: The `IPython.kernel` package has been deprecated since IPython
4.0.You should import from ipykernel or jupyter_client instead.
    warn("The `IPython.kernel` package has been deprecated since IPython 4.0."
WARNING: AstropyDeprecationWarning: The private astropy._erfa module has been
made into its own package, pyerfa, which is a dependency of astropy and can be
imported directly using "import erfa" [astropy._erfa]
C:\Users\new\anaconda3\lib\pkgutil.py:93: MatplotlibDeprecationWarning:
The matplotlib.compat module was deprecated in Matplotlib 3.3 and will be
removed two minor releases later.
    __import__(info.name)
C:\Users\new\anaconda3\lib\site-packages\nltk\twitter\__init__.py:20:
UserWarning: The twython library has not been installed. Some functionality from
the twitter package will not be available.
    warnings.warn(
QSS file sucessfully loaded.
Found application patches to be applied.
No QApplication instance found. Application patches not applied. You have to
call load_stylesheet function after instantiation of QApplication to take
effect.
C:\Users\new\anaconda3\lib\pkgutil.py:108: VisibleDeprecationWarning:
zmq.eventloop.minitornado is deprecated in pyzmq 14.0 and will be removed.
    Install tornado itself to use zmq with the tornado IOLoop.
```

```
yield from walk_packages(path, info.name+'.', onerror)
```

Cython	collections	msgpack	sphinx
IPython	colorama	msilib	sphinxcontrib
OpenSSL	colorsys	msvcrt	spyder
PIL	commctrl	multipledispatch	spyder_kernels
PyQt5	compileall	multiprocessing	sqlalchemy
TBB	comtypes	munkres	sqlite3
__future__	concurrent	mypy_extensions	sre_compile
_abc	conda	mysql	sre_constants
_aix_support	conda_build	mysqlx	sre_parse

_ast	conda_content_trust	nacl	ssl
_asyncio	conda_env	navigator_updater	sspi
_bisect	conda_pack	nbclassic	sspicon
_black_version	conda_package_handling	nbclient	stat
_blake2	conda_token	nbconvert	statistics
_bootlocale	conda_verify	nbformat	statsmodels
_bootsubprocess	configparser	nest_asyncio	storemagic
_bz2	contextlib	netbios	string
_cffi_backend	contextlib2	netrc	stringprep
_codecs	contextvars	networkx	struct
_codecs_cn	cookiecutter	nlk	subprocess
_codecs_hk	copy	nntplib	sunau
_codecs_iso2022	copyreg	nose	symbol
_codecs_jp	crypt	notebook	sympy
_codecs_kr	cryptography	nt	sympyprinting
_codecs_tw	csv	ntpath	symtable
_collections	ctypes	ntsecuritycon	sys
_collections_abc	curl	nturl2path	sysconfig
_compat_pickle	curses	numba	tables
_compression	cwp	numbers	tabnanny
_contextvars	cycler	numexpr	tarfile
_csv	cython	numpy	tbb
_ctypes	cythonmagic	numpydoc	tblib
_ctypes_test	cytoolz	oauthlib	telnetlib
_daal4py	daal4py	odbc	tempfile
_datetime	dask	olefile	tensorboard
_decimal	dataclasses	onedal	
tensorboard_data_server			
_distutils_hack	datetime	opcode	
tensorboard_plugin_wit			
_elementtree	dateutil	openpyxl	tensorflow
_functools	dbi	operator	tensorflow_estimator
_hashlib	dbm	opt_einsum	
tensorflow_io_gcs_filesystem			
_heapq	dde	optparse	termcolor
_imp	debugpy	os	terminado
_io	decimal	packaging	test
_json	decorator	pandas	test_data
_locale	defusedxml	pandocfilters	test_pycosat
_lsprof	diff_match_patch	paramiko	testpath
_lzma	difflib	parser	tests
_markupbase	dis	parso	text_unidecode
_md5	distributed	partd	textdistance
_msi	distutils	past	textwrap
_multibytecodec	doctest	pasta	this
_multiprocessing	docutils	path	threading
_mysql_connector	email	pathlib	threadpoolctl
_mysqlxpb	encodings	pathlib2	three_merge

_nsis	ensurepip	pathspec	tifffile
_onedal4py_host	entrypoints	patsy	time
_opcode	enum	pdb	timeit
_operator	erfa	pep8	timer
_osx_support	errno	perfmon	tinycss
_overlapped	et_xmlfile	pexpect	tkinter
_peg_parser	fastcache	pickle	tlz
_pickle	faulthandler	pickleshare	token
_py_abc	filecmp	pickletools	tokenize
_pydecimal	fileinput	pip	toml
_pyio	filelock	pipes	toolz
_pysistent_version	flake8	pkg_resources	tornado
_pytest	flask	pkginfo	tqdm
_queue	flatbuffers	pkgutil	trace
_random	fnmatch	platform	traceback
_sha1	fontTools	plistlib	tracemalloc
_sha256	formatter	pluggy	traitlets
_sha3	fractions	ply	tty
_sha512	fsspec	poplib	turtle
_signal	ftplib	posixpath	turtledemo
_sitebuiltins	functools	poyo	typed_ast
_socket	future	pprint	types
_sqlite3	gast	profile	typing
_sre	gc	prometheus_client	typing_extensions
_ssl	genericpath	prompt_toolkit	ujson
_stat	getopt	pstats	unicodcsv
_statistics	getpass	psutil	unicodedata
_string	gettext	pty	unidecode
_strptime	gevent	ptyprocess	unittest
_struct	glob	pvectorc	urllib
_symtable	glob2	py	urllib3
_system_path	google_auth_oauthlib	py_compile	uu
_testbuffer	graphlib	pyasn1	uuid
_testcapi	greenlet	pyasn1_modules	venv
_testconsole	grpc	pyclbr	warnings
_testimportmultiple	gzip	pycodestyle	watchdog
_testinternalcapi	h5py	pycosat	wave
_testmultiphase	hashlib	pycparser	wcwidth
_thread	heapdict	pycurl	weakref
_threading_local	heapq	pydoc	webbrowser
_tkinter	hmac	pydoc_data	webencodings
_tracemalloc	html	pydocstyle	werkzeug
_uuid	html5lib	pyexpat	wheel
_warnings	http	pyflakes	whichcraft
_weakref	idlelib	pygments	widetsnbextension
_weakrefset	idna	pylab	win2kras
_win32sysloader	imagecodecs	pylint	win32api
_winapi	imageio	pyls_spyder	win32clipboard

_winxptheme	imagesize	pylsp	win32com
_xxsubinterpreters	imaplib	pylsp_black	win32con
_yaml	imgchr	pylsp_jsonrpc	win32console
_zoneinfo	imp	pyodbc	win32cred
abc	importlib	pyparsing	win32crypt
absl	importlib_metadata	pyreadline	win32cryptcon
adodbapi	inflection	pyrsistent	win32ctypes
afxres	iniconfig	pytest	win32event
aifc	inspect	pythoncom	win32evtlog
alabaster	intervaltree	pytz	win32evtlogutil
anaconda_navigator	io	pywin	win32file
anaconda_project	ipaddress	pywin32_bootstrap	win32gui
antigravity	ipykernel	pywin32_testutil	win32gui_struct
anyio	ipykernel_launcher	pywintypes	win32help
appdirs	ipython_genutils	pywt	win32inet
argh	ipywidgets	pyximport	win32inetcon
argon2	isapi	qdarkstyle	win32job
argparse	isort	qstylizer	win32lz
array	isympy	qtawesome	win32net
arrow	itertools	qtconsole	win32netcon
asn1crypto	itsdangerous	qtpy	win32pdh
ast	jdcal	queue	win32pdhquery
astroid	jedi	quopri	win32pdhutil
astropy	jinja2	random	win32pipe
astunparse	jinja2_time	rasutil	win32print
async_generator	joblib	re	win32process
asynchat	json	readline	win32profile
asyncio	json5	regcheck	win32ras
asyncore	jsonschema	regex	win32rcparser
atexit	jupyter	regutil	win32security
atomicwrites	jupyter_client	repo_cli	win32service
attr	jupyter_console	reprlib	win32serviceutil
audioop	jupyter_core	requests	win32timezone
autopep8	jupyter_server	requests_oauthlib	win32trace
autoreload	jupyterlab	rlcompleter	win32traceutil
babel	jupyterlab_pygments	rmagic	win32transaction
backcall	jupyterlab_server	rope	win32ts
backports	jupyterlab_widgets	rsa	win32ui
base64	jwt	rtree	win32uirole
bcrypt	keras	ruamel_yaml	win32verstamp
bdb	keras_preprocessing	run	win32wnet
binaryornot	keyring	runpy	win_inet_pton
binascii	keyword	sched	win_unicode_console
binhex	kiwisolver	scipy	wincertstore
binstar_client	lazy_object_proxy	scripts	winerror
bisect	lib2to3	seaborn	winioctlcon
bitarray	libarchive	secrets	winnt
bkcharts	libfuturize	select	winperf

black	libpasteurize	selectors	winpty
blackd	lief	send2trash	winreg
bleach	linecache	servicemanager	winsound
blib2to3	llvmlite	setuptools	winxpgui
bokeh	locale	shelve	winxptheme
boto	locket	shlex	wrapt
bottleneck	logging	shutil	wsgiref
brotli	lxml	signal	xdrlib
bs4	lzma	simplegeneric	xlrd
builtins	mailbox	singledispatch	xlswriter
bz2	mailcap	sip	xlwings
cProfile	markdown	sipconfig	xlwt
cached_property	markupsafe	sipdistutils	xml
cachetools	marshal	site	xmlrpc
calendar	math	six	xmldict
certifi	matplotlib	skimage	xxsubtype
cffi	matplotlib_inline	sklearn	yaml
cgi	mccabe	sklearnex	yapf
cglib	menuinst	slugify	yapftests
chardet	mimetypes	smtpd	zict
charset_normalizer	mistune	smtplib	zipapp
chunk	mkl	sndhdr	zipfile
clang	mkl_fft	sniffio	zipimport
click	mkl_random	snowballstemmer	zipp
cloudpickle	mmap	socket	zlib
clyent	mmapfile	socketserver	zmq
cmath	mmsystem	socks	zoneinfo
cmd	mock	sockshandler	zope
code	modulefinder	sortedcollections	
codecs	more_itertools	sortedcontainers	
codeop	mpmath	soupsieve	

Enter any module name to get more help. Or, type "modules spam" to search for modules whose name or summary contain the string "spam".

```
[52]: import math
```

```
[130]: math.pi
```

```
[130]: 3.141592653589793
```

```
[131]: math.e
```

```
[131]: 2.718281828459045
```

```
[132]: math.factorial(5)
```


[132]: 120

```
[133]: math.ceil(6.3)
```

[133]: 7

```
[134]: math.floor(6.9)
```

[134]: 6

```
[135]: math.sqrt(100)
```

[135]: 10.0

```
[136]: import random
```

```
[137]: random.randint(1,100)
```

[137]: 86

```
[140]: a=[2,4,7,1,3,10]
      random.shuffle(a)
      a
```

[140]: [3, 1, 7, 10, 2, 4]

```
[39]: import time
```

```
[40]: time.time()
```

[40]: 1725938532.0330508

```
[41]: time.ctime()
```

[41]: 'Tue Sep 10 08:52:21 2024'

```
[144]: time.sleep(1)
```

```
[146]: print('Hello')
      time.sleep(3)
      print("python")
```

Hello
python

```
[147]: import os
```

```
[148]: os.getcwd()
```

```
[148]: 'C:\\\\Users\\new'
```

```
[64]: os.listdir()
```

```
[64]: ['.anaconda',  
      '.astropy',  
      '.cache',  
      '.conda',  
      '.condarc',  
      '.continuum',  
      '.eclipse',  
      '.gitconfig',  
      '.ipynb_checkpoints',  
      '.ipython',  
      '.jupyter',  
      '.keras',  
      '.matplotlib',  
      '.p2',  
      '.spyder-py3',  
      '01-11-2021 930AM.ipynb',  
      '02-11-2021 930AM.ipynb',  
      '03-11-2021 930AM.ipynb',  
      '05-11-2021 930AM.ipynb',  
      '06-11-2021 930AM.ipynb',  
      '09-10-2021 930AM.ipynb',  
      '09-11-2021 930AM.ipynb',  
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      '12-10-2021 930AM.ipynb',  
      '13-10-2021 930AM.ipynb',  
      '17-11-2021 930AM.ipynb',  
      '18-10-2021 930AM.ipynb',  
      '18-11-21 930am.ipynb',  
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      '21-10-2021 930AM.ipynb',  
      '22-09-2021 930AM.ipynb',  
      '22-10-2021 930AM.ipynb',  
      '22-11-2021 930AM.ipynb',  
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      '23-09-2021 930AM.ipynb',  
      '23-11-2021 930AM.ipynb',  
      '24-09-2021 930PM.ipynb',
```

'24-11-2021 930AM.ipynb',
'25-09-2021 930PM.ipynb',
'25-10-2021 930AM.ipynb',
'25-11-2021 930AM.ipynb',
'26-11-2021 930AM.ipynb',
'27-10-2021 930PM.ipynb',
'27-11-2021 930PM.ipynb',
'27-12-2021 930AM.ipynb',
'28-09-2021 930AM.ipynb',
'28-10-2021 930PM.ipynb',
'29-11-2021 930AM.ipynb',
'30-11-2021 930AM.ipynb',
'30-12-2021 930AM.ipynb',
'3D Objects',
'abcd.txt',
'anaconda3',
'AppData',
'Application Data',
'arpit.ipynb',
'Class.ipynb',
'Contacts',
'Cookies',
'Data types.ipynb',
'dataset',
'Day-2.ipynb',
'Day_1.ipynb',
'Day_3.ipynb',
'demofile.txt',
'demofile1.txt',
'demofile2.txt',
'Desktop',
'Documents',
'Downloads',
'eclipse',
'eclipse-workspace',
'Exam.ipynb',
'Exception.ipynb',
'Favorites',
'File.ipynb',
'File_operation.ipynb',
'FrozenSet.ipynb',
'Functions.ipynb',
'IntelGraphicsProfiles',
'KNN.ipynb',
'Links',
'Local Settings',
'Main_Code_Alzheimer.ipynb',

```

'MicrosoftEdgeBackups',
'Music',
'My Documents',
'NetHood',
'NTUSER.DAT',
'ntuser.dat.LOG1',
'ntuser.dat.LOG2',
'NTUSER.DAT{8930bb1d-71db-11ec-85e9-c54d9abb5bc}.TM.blf',
'NTUSER.DAT{8930bb1d-71db-11ec-85e9-c54d9abb5bc}.TMContainer000000000000000000
01.regtrans-ms',
'NTUSER.DAT{8930bb1d-71db-11ec-85e9-c54d9abb5bc}.TMContainer000000000000000000
02.regtrans-ms',
'ntuser.ini',
'OneDrive',
'Operators and Control statements.ipynb',
'Pictures',
'PrintHood',
'python_1.ipynb',
'python_4.ipynb',
'Recent',
'Saved Games',
'seaborn-data',
'Searches',
'SendTo',
'Start Menu',
'student.txt',
'student1.txt',
'student11.txt',
'student2.txt',
'student22.txt',
'studentcse.txt',
'student_writelines.txt',
'Templates',
'text1.txt',
'Untitled.ipynb',
'Untitled1.ipynb',
'Untitled2.ipynb',
'Untitled3.ipynb',
'Untitled4.ipynb',
'Videos',
'xyz.txt']

```

#sting #creating

```

[73]: c='Hello'
      print(c)

```

Hello

```
[74]: c="Hello"  
print(c)
```

Hello

```
[13]: c='Hello'  
print(c)
```

Hello

```
[75]: c="It's raning today"  
print(c)
```

It's raning today

```
[76]: c=''Hello  
you  
are  
the  
yoy  
are  
the  
goo'''  
print(c)
```

Hello
you
are
the
yoy
are
the
goo

```
[77]: c=str(5)  
c
```

```
[77]: '5'
```

```
[2]: c='hello'  
print(c)  
print(c[4])
```

hello
o

```
[7]: print(c[5])
```

```
-----  
IndexError                                Traceback (most recent call last)  
C:\PROGRA~1\KMSpico\temp\ipykernel_8972\129856708.py in <module>  
----> 1 print(c[5])  
  
IndexError: string index out of range
```

```
[92]: c="Heuloworld"  
      print(c)
```

Heuloworld

```
[84]: print(c[0:8])
```

Hello wo

```
[85]: print(c[2:])
```

llo world

```
[86]: print(c[:4])
```

Hell

```
[87]: print(c[:])
```

Hello world

```
[93]: print(c[2:9:3])
```

uwl

```
[94]: print(c[::-1])
```

dlrowolueH

editing & deleting mutable and immutable

```
[8]: c="hello"  
     print(c)  
     c[2]='x'
```

hello

```
-----  
TypeError                                Traceback (most recent call last)  
C:\PROGRA~1\KMSpico\temp\ipykernel_8972\2177209578.py in <module>  
1 c="hello"
```

```
2 print(c)
----> 3 c[2]='x'
```

TypeError: 'str' object does not support item assignment

```
[9]: print(c)
del c[0]
```

hello

```
-----
TypeError                                Traceback (most recent call last)
C:\PROGRA~1\KMSpico\temp\ipykernel_8972\3943261516.py in <module>
      1 print(c)
----> 2 del c[0]

TypeError: 'str' object doesn't support item deletion
```

```
[152]: print(c)
del c
```

hello

```
[154]: print(c)
```

```
-----
NameError                                Traceback (most recent call last)
C:\PROGRA~1\KMSpico\temp\ipykernel_17240\2743823995.py in <module>
----> 1 print(c)

NameError: name 'c' is not defined
```

Operation of string

```
[102]: 'Hello' + 'World'
```

```
[102]: 'HelloWorld'
```

```
[157]: print("*" * 50)
```

```
[106]: print("Hello" * 10)
```

HelloHelloHelloHelloHelloHelloHelloHelloHelloHello

```
[158]: #Relation operation
```

```
"Hello" == "world"
```

```
[158]: False
```

```
[159]: "Hello" != "world"
```

```
[159]: True
```

```
[162]: "Mumbai" > "Pune"
```

```
[162]: False
```

```
[10]: 'Kol' < 'kol'
```

```
[10]: True
```

```
[111]: #Logical operation
```

```
'Hello' and 'world'
```

```
[111]: 'world'
```

```
[164]: '' and 'Hello'
```

```
[164]: ''
```

```
[113]: '' or 'world'
```

```
[113]: 'world'
```

```
[114]: 'Hello' or 'world'
```

```
[114]: 'Hello'
```

```
[11]: not 'hello'
```

```
[11]: False
```

```
[116]: not ''
```

```
[116]: True
```

```
[13]: #loop in string
```

```
c="hello world"
```

```
for i in c:
```



```
print(i)
```

```
h  
e  
l  
l  
o  
  
w  
o  
r  
l  
d
```

```
[14]: for i in c[2:7]:  
      print(i)
```

```
l  
l  
o  
  
w
```

```
[15]: for i in c[2:7:2]:  
      print(i)
```

```
l  
o  
w
```

```
[19]: for i in c[::-1]:  
      print(i)
```

```
d  
l  
r  
o  
w  
  
o  
l  
l  
e  
h
```

```
[17]: #Member ship operator in or not in
```

```
c
```

[17]: 'hello world'

```
[20]: 'h' in c
```

[20]: True

```
[21]: 'H' in c
```

[21]: False

```
[22]: 'world' not in c
```

[22]: False

```
[23]: # len , max, min, sorted  
  
a= 'kolkata'  
sorted(a)
```

[23]: ['a', 'a', 'k', 'k', 'l', 'o', 't']

```
[24]: sorted(a,reverse=True)
```

[24]: ['t', 'o', 'l', 'k', 'k', 'a', 'a']

```
[25]: sorted(a,reverse=False)
```

[25]: ['a', 'a', 'k', 'k', 'l', 'o', 't']

```
[26]: " ".join(['who', 'is','the','pm','of','india'])
```

[26]: 'who is the pm of india'

```
[29]: "/" .join(['who', 'is','the','pm','of','india'])
```

[29]: 'who/is/the/pm/of/india'

```
[30]: "-" .join(['who', 'is','the','pm','of','india'])
```

[30]: 'who-is-the-pm-of-india'

```
[31]: #replace  
"Hi my name is khan".replace("khan","Dr.Safdar")
```

[31]: 'Hi my name is Dr.Safdar'

```
[34]: #strip
      name = 'Dr.Safdar'
      name
```

```
[34]: 'Dr.Safdar'
```

```
[35]: 'hi' + name
```

```
[35]: 'hiDr.Safdar'
```

```
[36]: name.strip()
```

```
[36]: 'Dr.Safdar'
```

```
[37]: 'hello'
```

```
[37]: 'hello'
```

```
[42]: #List
      l=[]
```

```
[43]: L=[1,2,3,4,5,10,111,1222]
      L
```

```
[43]: [1, 2, 3, 4, 5, 10, 111, 1222]
```

```
[44]: L2=[1,'hello',4.55,True,5+4j]
      L2
```

```
[44]: [1, 'hello', 4.55, True, (5+4j)]
```

```
[45]: #2D
      L3=[1,2,3,[4,5]]
      L3
```

```
[45]: [1, 2, 3, [4, 5]]
```

```
[46]: #3D
      L4=[[1,2],[3,4]],[[5,6],[7,8]]
      L4
```

```
[46]: [[[1, 2], [3, 4]], [[5, 6], [7, 8]]]
```

```
[47]: L5=list('safdar')
      L5
```

```
[47]: list['safdar']
```

```
[48]: L=[1,2,3,4,10]  
L
```

```
[48]: [1, 2, 3, 4, 10]
```

```
[49]: L[-1]
```

```
[49]: 10
```

```
[50]: L[::-1]
```

```
[50]: [10, 4, 3, 2, 1]
```

```
[51]: L3
```

```
[51]: [1, 2, 3, [4, 5]]
```

```
[52]: L3[-1]
```

```
[52]: [4, 5]
```

```
[213]: L3[-1][0]
```

```
[213]: 4
```

```
[214]: L3[-1][1]
```

```
[214]: 5
```

```
[53]: L3[-1][-1]
```

```
[53]: 5
```

```
[54]: L4
```

```
[54]: [[[1, 2], [3, 4]], [[5, 6], [7, 8]]]
```

```
[55]: L4[1][1][0]
```

```
[55]: 7
```

```
[56]: L4[1][1][-1]
```

```
[56]: 8
```

[57]: L4[0][1][1]

[57]: 4

[12]: 2==2

[12]: True

[]: