```python
"""
See Portable Document Format Reference Manual, 1993. ISBN 0-201-62628-4.

See
https://ia802202.us.archive.org/8/items/pdfy-0vt8s-egqFwDl7L2/PDF%20Reference%201.0
.pdf

PDF Reference, third edition, Version 1.4, 2001. ISBN 0-201-75839-3.

PDF Reference, sixth edition, Version 1.7, 2006.
"""

from enum import IntFlag
from typing import Dict, Tuple


class Core:
    """Keywords that don't quite belong anywhere else."""

    OUTLINES = "/Outlines"
    THREADS = "/Threads"
    PAGE = "/Page"
    PAGES = "/Pages"
    CATALOG = "/Catalog"


class TrailerKeys:
    ROOT = "/Root"
    ENCRYPT = "/Encrypt"
    ID = "/ID"
    INFO = "/Info"
    SIZE = "/Size"


class CatalogAttributes:
    NAMES = "/Names"
    DESTS = "/Dests"


class EncryptionDictAttributes:
    """
    Additional encryption dictionary entries for the standard security handler.

    TABLE 3.19, Page 122
    """

    R = "/R"  # number, required; revision of the standard security handler
    O = "/O"  # 32-byte string, required
    U = "/U"  # 32-byte string, required
    P = "/P"  # integer flag, required; permitted operations
```

```python
    ENCRYPT_METADATA = "/EncryptMetadata"  # boolean flag, optional


class UserAccessPermissions(IntFlag):
    """TABLE 3.20 User access permissions"""

    R1 = 1
    R2 = 2
    PRINT = 4
    MODIFY = 8
    EXTRACT = 16
    ADD_OR_MODIFY = 32
    R7 = 64
    R8 = 128
    FILL_FORM_FIELDS = 256
    EXTRACT_TEXT_AND_GRAPHICS = 512
    ASSEMBLE_DOC = 1024
    PRINT_TO_REPRESENTATION = 2048
    R13 = 2**12
    R14 = 2**13
    R15 = 2**14
    R16 = 2**15
    R17 = 2**16
    R18 = 2**17
    R19 = 2**18
    R20 = 2**19
    R21 = 2**20
    R22 = 2**21
    R23 = 2**22
    R24 = 2**23
    R25 = 2**24
    R26 = 2**25
    R27 = 2**26
    R28 = 2**27
    R29 = 2**28
    R30 = 2**29
    R31 = 2**30
    R32 = 2**31


class Ressources:
    """TABLE 3.30 Entries in a resource dictionary."""

    EXT_G_STATE = "/ExtGState"  # dictionary, optional
    COLOR_SPACE = "/ColorSpace"  # dictionary, optional
    PATTERN = "/Pattern"  # dictionary, optional
    SHADING = "/Shading"  # dictionary, optional
    XOBJECT = "/XObject"  # dictionary, optional
    FONT = "/Font"  # dictionary, optional
    PROC_SET = "/ProcSet"  # array, optional
```

```python
        PROPERTIES = "/Properties"  # dictionary, optional


class PagesAttributes:
    """Page Attributes, Table 6.2, Page 52."""

    TYPE = "/Type"  # name, required; must be /Pages
    KIDS = "/Kids"  # array, required; List of indirect references
    COUNT = "/Count"  # integer, required; the number of all nodes und this node
    PARENT = "/Parent"  # dictionary, required; indirect reference to pages object


class PageAttributes:
    """TABLE 3.27 Entries in a page object."""

    TYPE = "/Type"  # name, required; must be /Page
    PARENT = "/Parent"  # dictionary, required; a pages object
    LAST_MODIFIED = (
        "/LastModified"  # date, optional; date and time of last modification
    )
    RESOURCES = "/Resources"  # dictionary, required if there are any
    MEDIABOX = "/MediaBox"  # rectangle, required; rectangle specifying page size
    CROPBOX = "/CropBox"  # rectangle, optional; rectangle
    BLEEDBOX = "/BleedBox"  # rectangle, optional; rectangle
    TRIMBOX = "/TrimBox"  # rectangle, optional; rectangle
    ARTBOX = "/ArtBox"  # rectangle, optional; rectangle
    BOX_COLOR_INFO = "/BoxColorInfo"  # dictionary, optional
    CONTENTS = "/Contents"  # stream or array, optional
    ROTATE = "/Rotate"  # integer, optional; page rotation in degrees
    GROUP = "/Group"  # dictionary, optional; page group
    THUMB = "/Thumb"  # stream, optional; indirect reference to image of the page
    B = "/B"  # array, optional
    DUR = "/Dur"  # number, optional
    TRANS = "/Trans"  # dictionary, optional
    ANNOTS = "/Annots"  # array, optional; an array of annotations
    AA = "/AA"  # dictionary, optional
    METADATA = "/Metadata"  # stream, optional
    PIECE_INFO = "/PieceInfo"  # dictionary, optional
    STRUCT_PARENTS = "/StructParents"  # integer, optional
    ID = "/ID"  # byte string, optional
    PZ = "/PZ"  # number, optional
    TABS = "/Tabs"  # name, optional
    TEMPLATE_INSTANTIATED = "/TemplateInstantiated"  # name, optional
    PRES_STEPS = "/PresSteps"  # dictionary, optional
    USER_UNIT = "/UserUnit"  # number, optional
    VP = "/VP"  # dictionary, optional


class FileSpecificationDictionaryEntries:
    """TABLE 3.41 Entries in a file specification dictionary"""
```

```python
    Type = "/Type"
    FS = "/FS"  # The name of the file system to be used to interpret this file
specification
    F = "/F"  # A file specification string of the form described in Section 3.10.1
    EF = "/EF"  # dictionary, containing a subset of the keys F , UF , DOS , Mac ,
and Unix


class StreamAttributes:
    """Table 4.2."""

    LENGTH = "/Length"  # integer, required
    FILTER = "/Filter"  # name or array of names, optional
    DECODE_PARMS = "/DecodeParms"  # variable, optional -- 'decodeParams is wrong


class FilterTypes:
    """
    Table 4.3 of the 1.4 Manual.

    Page 354 of the 1.7 Manual
    """

    ASCII_HEX_DECODE = "/ASCIIHexDecode"  # abbreviation: AHx
    ASCII_85_DECODE = "/ASCII85Decode"  # abbreviation: A85
    LZW_DECODE = "/LZWDecode"  # abbreviation: LZW
    FLATE_DECODE = "/FlateDecode"  # abbreviation: Fl, PDF 1.2
    RUN_LENGTH_DECODE = "/RunLengthDecode"  # abbreviation: RL
    CCITT_FAX_DECODE = "/CCITTFaxDecode"  # abbreviation: CCF
    DCT_DECODE = "/DCTDecode"  # abbreviation: DCT


class FilterTypeAbbreviations:
    """Table 4.44 of the 1.7 Manual (page 353ff)."""

    AHx = "/AHx"
    A85 = "/A85"
    LZW = "/LZW"
    FL = "/Fl"  # FlateDecode
    RL = "/RL"
    CCF = "/CCF"
    DCT = "/DCT"


class LzwFilterParameters:
    """Table 4.4."""

    PREDICTOR = "/Predictor"  # integer
    COLUMNS = "/Columns"  # integer
```