

Download YouTube Content Using Python



#1

Required Module:

PyTube Module:

Python pytube module consists of various methods and classes by using which we can download YouTube videos or fetch the Video metadata.

The Pytube module is not a Built-in module, so we need to install it separately, using the python-pip command.

```
pip install pytube
```

#2

Get Video Meta Data:

Before downloading the YouTube Video, let's first fetch the Video meta data like, video title, video length, total views on videos etc.

```
from pytube import YouTube

# Function Takes YouTube Object as Argument.
def video_Info(yt):
    print("Title : ",yt.title)
    print("Total Length : ",yt.length," Seconds")
    print("Total Views : ",yt.views)
    print("Is Age Restricted : ",yt.age_restricted)
    print("Video Rating ",round(yt.rating))
    print("Thumbnail Url : ",yt.thumbnail_url)

link = "YouTube Video URL "
yt = YouTube(link) # Create Youtube Object..

# call the function
video_info(yt)
```


Download YouTube Video in mp4 format:

To download YouTube Videos in MP4 format, we need to filter all the MP4 streams and then use that itag value of a specific stream to download the Video.

```
from pytube import YouTube

def download_video(yt):
    # filter mp4 streams from object
    my_streams = yt.streams.filter(file_extension='mp4', only_video=True)
    for streams in my_streams:
        # print itag, resolution and codec format of Mp4 streams
        print(f"Video itag : {streams.itag} Resolution : {streams.resolution}")

    # enter the itag value of resolution on which you want to download the video
    input_itag = input("Enter itag Value : ")
    # get video using itag value
    video = yt.streams.get_by_itag(input_itag)

    # finally download the YouTube Video...
    video.download()
    print("Video is Downloading as", yt.title + ".mp4")

link = "Enter Your Link Here"
# Create YouTube Object.
yt = YouTube(link)
# call The function..
download_video(yt)
```

#4

Download YouTube Video in Audio format:

```
from pytube import YouTube

# Define Function ...
def download_Audio(yt):
    # Filter all the audio files
    my_streams = yt.streams.filter(only_audio=True)
    for streams in my_streams:
        # print audio quality/itag/codec
        print(f"Audio itag : {streams.itag} Quality : {streams.abr} ")

    input_itag = input("Enter itag Value : ")
    audio = yt.streams.get_by_itag(input_itag)

    audio.download() # download the Video in audio format..
    # audio.download(r"New path where you want to save the file")
    print("Audio is Downloading as ",yt.title+".mp3")

link = "Your Link "
yt = YouTube(link) # create Object ..
download_Audio(yt) # call the function
```


#5

Download complete YouTube Playlist:

To download a complete YouTube playlist we need to create a Playlist class Object of Pytube module.

```
from pytube import Playlist

def download_Playlist(p):
    # print Playlist Title..
    print(p.title)
    # get videos of playlist..
    for video in p.videos:
        try:
            # download all videos in best resolution
            video.streams.first().download(video.title)
        except Exception as e:
            print(e, type(e))
    print("Playlist is Downloaded")

link = "Youtube Playlist URL"
p = Playlist(link) # create Playlist object
download_playlist(p) # call the function
```