The algorithm of the Python code to download YouTube videos is as follows:

- Import the pytube library.
- Create a YouTube object by passing in the URL of the video you want to download. This object represents the YouTube video that you want to download.
- Get the video's title and duration. This information can be used to identify the video
- track the progress of the download.
- Get the video's streams. This will return a list of all the available streams for the video.
- Choose the stream you want to download. You can choose the highest resolution stream,
- or you can choose a lower resolution stream if you want to save on bandwidth.
- Start the download. This will download the video to your computer.
- Once the download is complete, you can play the video in your favorite media player.

Here is the pseudocode broken down into steps:

Import the pytube library.

import pytube

Create a YouTube object.

youtube = pytube.YouTube(video_url)

Get the video's title and duration.

title = youtube.title

duration = youtube.duration

Get the video's streams.

streams = youtube.streams

Choose the stream you want to download.

stream = streams.get_highest_resolution()

Start the download.

stream.download()

Print a message to the console.

print("Download of {} ({}) completed.".format(title, duration))

flowchart for the Python program to download YouTube videos:

