Program - 1

str = "HELLO"

**print**(str[0])

**print**(str[1])

**print**(str[2])

**print**(str[3])

**print**(str[4])

# It returns the IndexError because 6th index doesn't exist

**print**(str[6])

**Output:**

H

E

L

L

O

IndexError: string index out of range

Program – 2

str = "JAVATPOINT"

**print**(str[0:])

# Starts 1th index to 4th index

**print**(str[1:5])

# Starts 2nd index to 3rd index

**print**(str[2:4])

# Starts 0th to 2nd index

**print**(str[:3])

#Starts 4th to 6th index

**print**(str[4:7])

**Output:**

JAVATPOINT

AVAT

VA

JAV

TPO

Program – 3

str = 'JAVATPOINT'

**print**(str[-1])

**print**(str[-3])

**print**(str[-2:])

**print**(str[-4:-1])

**print**(str[-7:-2])

# Reversing the given string

**print**(str[::-1])

**print**(str[-12])

**Output:**

T

I

NT

OIN

ATPOI

TNIOPTAVAJ

IndexError: string index out of range

Program – 4

str = "HELLO"

str[0] = "h"

**print**(str)

**Output:**

Traceback (most recent call last):

File "12.py", line 2, in <module>

str[0] = "h";

TypeError: 'str' object does not support item assignment

Program -4

|  |
| --- |
| # Import time module  **import** time    # record start time  start **=** time.time()    # define a sample code segment  a **=** 0  **for** i **in** range(1000):      a **+=** (i**\*\***100)    # record end time  end **=** time.time()    # print the difference between start  # and end time in milli. secs  **print**("The time of execution of above program is :",        (end**-**start) **\*** 10**\*\***3, "ms") |

**Output:**

The time of execution of above program is : 0.77056884765625 ms

Program – 5

import time

start\_time = time.time()

main()

print("--- %s seconds ---" % (time.time() - start\_time))

This assumes that your program takes at least a tenth of second to run.

Prints:

--- 0.764891862869 seconds ---

Program - 6

print ("Please give me a number:",)

response = raw\_input()

number = int(response)

plusTen = number + 10

print ("If we add 10 to your number, we get " + str(plusTen))

**from** datetime **import** datetime

# String with full day and month name

date\_str = "Wednesday,10 February,2021 12:19:47"

# %A is to parse weekday and %B to parse month name

dt\_obj = datetime.strptime(date\_str, "%A,%d %B,%Y %H:%M:%S")

**print**("Date Object:", dt\_obj)

# Output 2021-02-10 12:19:47

**Example 2**: String with abbreviated Day and Month Names

**from** datetime **import** datetime

# String with full day and month name

date\_str = "Wed,10 Feb,21"

# %a is to parse short weekday and %b to parse short month name

dt\_obj = datetime.strptime(date\_str, "%a,%d %b,%y")

**print**("Date Object:", dt\_obj)

# Output Date Object: 2021-02-10 00:00:00