

Assignment -2

Q1. How do you comment code in Python? What are the different types of comments?

Ans1. In Python comments are these lines that are ignored by the compiler during the execution. There are two types of comments in Python.

1. **Single Line comment-** In python single lines comments are provided by using hash(#).
2. **Multiline comment-** In python multilines comment are provide using three single('') or double queots(''').

Q2. What are variables in Python? How do you declare and assign values to variables?

Ans2.

Variable

Variable are the place name of memory that are hold the value of any types of value as – string, complex , Integer etc.

In Python we can declare a variable by difining a name and assign a value using = sign.

Example-

```
my_list=[1,2,3,4,5,6,7,"Tej pal"]
```

Q3. How do you convert one data type to another in Python?

Ans3.

Using typecasting we can convert one data type to another.

Example-

`age = "19" # In this string are stored`

`correct_age = int(age) # In this line we convert string in Integer value.`

Q4. How do you write and execute a Python script from the command line?

To run Python scripts with the python command, you need to open a command-line and type in the word python , or python3 if you have both versions, followed by the path to your script

Q5. Given a list `my_list = [1, 2, 3, 4, 5]`, write the code to slice the list and obtain the sub-list `[2, 3]`.

Ans5.

```
My_list=[1,2,3,4,5]
```

```
Print(my_list[1:3])
```

Q6. What is a complex number in mathematics, and how is it represented in Python?

Ans6. Numbers that are represented in form of `a+bi` is called Complex number.where `a,b` are the real number and `i` is an imaginary numbers.

In python complex variable are represented in form of `a+bj`

Example-

```
Complex_Num=5+9j
```

Q7. What is the correct way to declare a variable named age and assign the value 25 to it?

Ans7.

age=25

Q8. Declare a variable named price and assign the value 9.99 to it. What data type does this variable belong to?

Ans8.

```
Price=9.99
```

```
Print(type(price))
```

Output-

float

Q9. Create a variable named name and assign your full name to it as a string. How would you print the value of this variable?

Ans9.

```
name="Tej pal"
```

```
print(name)
```

output-

Tej pal

Q10. Given the string "Hello, World!", extract the substring "World".

Ans10.

```
String="Hello, world"
```

```
Print(String[7:12])
```

Q11. Create a variable named "is_student" and assign it a boolean value indicating whether you are currently a student or not.

Ans11.

Is_student=True

If(is_student):

Print("Yes You are currently student")

else:

print("You are not a student")