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

- comments are the line/ line's in code which is ignored by the interpreter when programe is running,
- It enchance the readability of the code and help the programmer to understand the code very carefully
- Comments in 3 types i) single line comment ii) Multi line comment iii) Dostring comment

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

- variables are the containers which can we store data values
- There no command for declaring a variable. Its created by the moment we first assign a value to it

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

- By typecasting we can convert once data type to another

In [ ]:
```
1
```

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

- 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].

In [1]:
```
1 my_list = [1,2,3,4,5]
2 my_list[1:3:1]
```

Out[1]:
```
[2, 3]
```

In [ ]:
```
1
```

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

- complex number is number that comination of real and imaginary part which represent as (x+yj)

In [2]:
```
1 complex_number = (2+5j)
```

In [3]:
```
1 type(complex_number)
```

Out[3]:
```
complex
```

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

In [4]:
```
1 age = int(25)
```

In [ ]:
```
1
```

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

In [5]:
```
1 price = 9.99
2 type(price) #---> float
```

Out[5]:
```
float
```

In [ ]:
```
1
```

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?

In [6]:
```
1 name ='Harikrishna'
2 print(name)
```

```
Harikrishna
```

In [ ]:
```
1
```

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

In [7]:
```
1 string = "Hello, World!"
2 string[7:12]
```

Out[7]:
```
'World'
```

In [ ]:
```
1
```

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

In [9]:
```
1 is_student = bool(1)
2 print(is_student)
```

```
True
```