

# Data science Assignment 2

July 27, 2023

```
[ ]: Q1. How do you comment code in Python? What are the different types of comments?
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```
[ ]: """ comments are english words that are used for explainig the code
      the comments are 2 types
      1.single line comment
      in single line comments we use #(Hash) for comments
      2.mutli line comments:
          these are more then 1 line comments and triple quotes are used
      ↪here""""""""
      """
```

```
[2]: #adding 2 numbers
```

```
[3]: 10+30
```

```
[3]: 40
```

```
[ ]: Q2. What are variables in Python? How do you declare and assign values to
      ↪variables?
```

```
[ ]: """ Variables refers to address location stored in memory
      variable can delcared by
      variable_name=variable_value"""
```

```
[1]: a = 20
```

```
[2]: a
```

```
[2]: 20
```

```
[ ]: """Q3. How do you convert one data type to another in Python?"""
```

```
[3]: """ By using type conversion we convert one data type to another data type"""
a=120
print(a)
type(a)
b=float(a)
```

```
print(b)
```

```
120  
120.0
```

```
[4]: #Q4. How do you write and execute a Python script from the command line?"""
```

```
[5]: #1:Open jupyter  
#2:create a new pythone notebook and save it using .pynb  
#3.write the code  
#4.save  
#5.press shift+enter or Run button
```

```
[ ]: """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]."""
```

```
[9]: l=[1,2,3,4,5]
```

```
[10]: l[1:3]
```

```
[10]: [2, 3]
```

```
[ ]: """Q6. What is a complex number in mathematics, and how is it represented in,  
↳Python?"""
```

```
[ ]: """complex numbers are commination of integer and imaginary value it represnted,  
↳in int+(img)j"""
```

```
[11]: i= 1+2j
```

```
[13]: type(i)  
print(i)
```

```
(1+2j)
```

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

```
[ ]: """ variable_name=variable_value is correct way of delcaring the variables"""
```

```
[14]: age = 25
```

```
[15]: print(age)
```

```
25
```

```
[ ]: """Q8. Declare a variable named price and assign the value 9.99 to it. What,  
↳data type does this variable  
belong to?"""
```

```
[16]: price =9.999
```

```
[19]: print(price)
      type (price)
```

9.999

```
[19]: 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?"""
```

```
[20]: name="Nayini Goutham Goud"
      print(name)
      type(name)
```

Nayini Goutham Goud

```
[20]: str
```

```
[ ]: """Q10. Given the string "Hello, World!", extract the substring "World"."""
```

```
[22]: h="Hello world!"
```

```
[23]: h[5:11]
```

```
[23]: ' world'
```

```
[ ]: """Q11. Create a variable named "is_student" and assign it a boolean value_
      ↳ indicating whether you are
      currently a student or not."""
```

```
[24]: is_student=True
      print(is_student)
```

True

```
[ ]:
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[ ]:
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