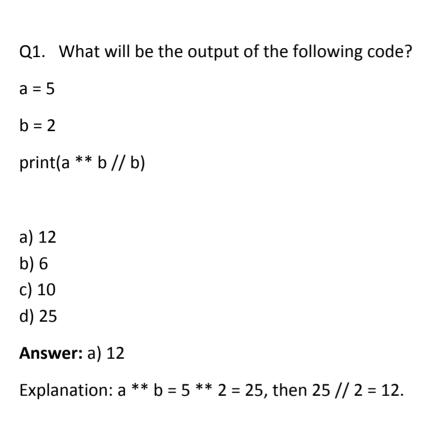
PYTHON FOR DATA SCIENCE ASSIGNMENT-1



Q2. If s = "Python", what will s[1:5:2] return?

- a) 'yth'
- b) 'yh'
- c) 'to'
- d) 'Pto'

Answer: b) 'yh'

Explanation: slicing from index 1 to 5 with step 2 \rightarrow characters at positions 1 and 3 = 'y' and 'h'.

Q3. What is slicing in Python sequences? Explain with examples using strings and lists.

Answer:

Slicing is a method of extracting a portion of a sequence (string, list, tuple) using indices. The syntax is:

```
sequence[start : stop : step]
start → index where slice begins (default = 0)
stop → index where slice ends (not included)
step → interval between elements (default = 1)
```