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Python for Data Analytics

1. What is Python and why is it useful?

ANS: Python is a general purpose, interpreted, interactive, object-oriented, and high-level programming language. This is because it: Is a strong and dynamically-typed language Has every variable as an object Is focused on reliability and productivity Has a dynamic community and user group. It is useful because Python can work on very, very large datasets – with ease! It makes analyzing data – from a few thousand rows to a few million rows very easy. It can perform complex operations – from machine learning, to web development. Python's code can be saved and re-run – making processes automated and a huge time saver.

2. Are the following variable names allowed in python?

- a. 1\_message
- b. Greeting\_message
- c. Message\_1
- d. First name
- e. Full\_name

ANS: b. c. e.

3. Create a variable that holds the string "hello there!"

Ans: 

```
greeting_message = "hello there!"  
print(greeting_message)  
hello there!
```

4. Create a variable for first name, last name and an email extension. Concatenating all three together to form an email address. For example: [firstname.lastname@gmail.com](mailto:firstname.lastname@gmail.com)

```
first_name = "lobsang"  
last_name = "dolma"  
email = "@gmail.com"  
full_emailid = first_name + "" + last_name + "" + email  
print(full_emailid)  
lobsangdoloma@gmail.com
```

5. Store someone you know name in a variable called name. Print their name in lower and uppercase using a method.

ANS:

```
name = "jennifer fox"
print(name.upper())
print(name.lower())
JENNIFER FOX
jennifer fox
```

6. Using a variable, ask your friend if they want to hang out on the 15<sup>th</sup> of the month. For example, "Do you want to hang out on the 15<sup>th</sup> of this month?" You should have to convert the number to a string.

Ans:

```
date = 15
message = "Do you want to hang out on the " + str(date) + "th of July?"
print(message)
Do you want to hang out on the 15th of July?
```