Challenge 01(Day 1/100): Full Python With DSA in 100 Days with Projects

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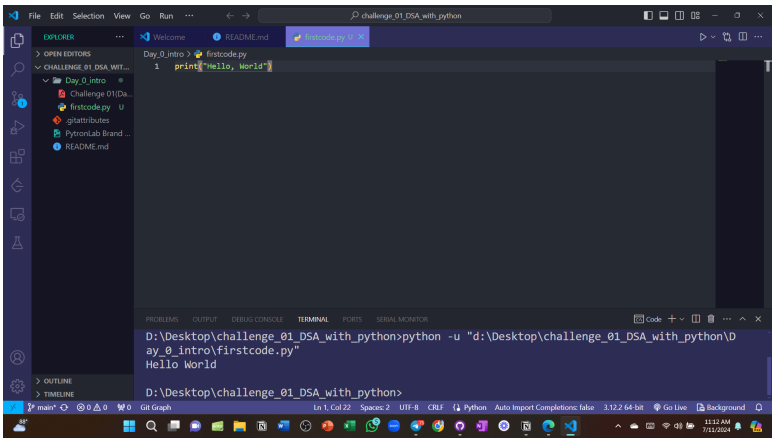
Day 1/100 : Print, Commenting ,Variables, Input with personalized story generator project

1-1: Printing in Python

Just like the first code from Day 0/100 , we use a built in function named ***print()*** **to print something in the output. Let's recap**



here you can the whatever we write between the **double quote** within the **brackets (" ") .** Whatever is written between this Double Quote is called ***Strings.***

We'll talk about this later in details.

Now let's dip dive into ***print()*** function. We can easily use multiple print functions for multiple lines. For example:

Code-1:

```
print("Good Morning!")
print("I'm Ashraful Islam Mahi")
print("Founder & CEO, PytronLab")
```

Output:

Good Morning

I'm Ashraful Islam Mahi

Founder & CEO , PytronLab

But this process isn't efficient because you've to use print functions for each and every line. We can simply avoid this situation using a escape function called **"\n". (new line)**

Now let's try again.

👨‍💻 Code-2:

```
print("Good Morning!\n I'm Ashraful Islam Mahi\n Founder & CEO, PytronLab")
```

Output:

Good Morning

I'm Ashraful Islam Mahi

Founder & CEO , PytronLab

See!!! , we can print multiple line using only one print() function with multiple \n operator. But this not the end. We can make this more efficient using ***multiline string***

👨‍💻 Code-3:

```
print("""Good Morning!
         Ashraful Islam Mahi
         Founder & CEO, PytronLab""")
```

Output:

Good Morning

I'm Ashraful Islam Mahi

Founder & CEO , PytronLab

This is the most efficient way to print multiline in python. Isn't python efficient and fun at the same time !!!!!

Now let's talk about the last application of print(). Sometimes we need to print double in the output. At that time we can use single quote for clarification

👨‍💻 Code-4:

```
print('''This is Ashraful, the "Owner" of "PytronLab"''')
```

Output:

This is Ashraful, the "Owner" of "PytronLab"

Let's get to the next topic.

1-2: Commenting in Python

Sometimes we need to write the explanation of the code within the code so that after a long time we can understand why we had written the code before. And this explanation can't be the part of the code. These explanations are called **Comments.** Comments are ignored by compiler. There are 2 kinds of comments. such as

- **Single Line Comment (use # or ctrl+/)**
- **Multi Line Comment ("""———-""")**

Let's finds out about them

Code-5

```
#This is my identity => comment
print('''This is Ashraful, the "Owner" of "PytronLab"''')
```

Output:

This is Ashraful, the “Owner” of “PytronLab”

Here, the comment is ignored by the compiler but when we’ll check the code we’ll find out why we’d written the print() function. Now let’s see multiline comment.

Code-6

```
"""This is my identity
   This is my comment"""
print('''This is Ashraful, the "Owner" of "PytronLab"''')
```

Output:

This is Ashraful, the “Owner” of “PytronLab”

Okay that’s enough for comment section . Now let’s move to the next section “variable”

1-3: Variable in Python

In simple language variables can be defined as **“Container”** to store certain value provided by the programmer or the user. You can understand better with example

Code-7

```
a = "Ashraful Islam Mahi"
b = "54"
print("My Name is", a)
print("My Roll number is",b)
```

Output:

My Name is Ashraful Islam Mahi
My Roll number is 54

Here you can see we can store strings in one variable(a) and store integer integer in another variable(b). You’ll understand variables far better when I’ll introduce data types next day. Now lets move to the final topic of today.

1-4: Input in Python

All the inputs we’ve made till now is by input during the code . But most of the time we’ve to take input from the user . We can do that easily by using another built in function named **input().** Let’s jump in the example.

Code-8

```
a = input("What is your name?\n")
print("Your name is:",a)
```

Output:

What is your name?

Ashraful Islam

Your name is: Ashraful Islam

Isn't it more easier than most other language to take input directly from the user!!! I know it is. Now we'll do some practice and then we'll implement a mini project.

1-5: Practice Problems

Here are some easy problems based on this chapter. Must attempt them on your own .To get the solution visit :

challange_01_Full_Python_with_DSA-_in_100_days/Day_1_project/Exercise at main · aimG313/challange_01_Full_Python_with_DSA-_in_100_da

This is my challange to complete entire python programming language including beginning, intermidiate, advanced & DSA level - aimG313/challange_01_Full_Python_with_DSA-_in_100_days

https://github.com/aimG313/challange_01_Full_Python_with_DSA-_in_100_days/tree/main/Day_1_project/Exercise

Practice-1

Write a Python code to print a output like this:

Output : "Ashraful" Islam 'Mahi'

Practice-2

Write a Python code to take 2 values from user input using 2 variables and interchange the values within the m without using a 3rd variable.

Example:

Input:

a = 1

b = 2

Output:

a = 2

b = 1

👨‍💻 Practice-3

Write a Python code to take the name of the users as input and welcome them in python programming with their name.

Example:

Input:

Enter your name :

Ashraful

Output:

Hello, Ashraful! Welcome to Python Programming.

Okay that’s enough for today now let’s make our first python mini project!!!!

 **1-6: Python Project-1: Personalized Story Generator**

Let’s make an exciting project which can generate a story based on the user inputs.

Project-1: Personalized Story Generator

```
# Personalized Story Generator

# Introduction and user input
print("Welcome to the Personalized Story Generator!")
print("Let's create a story based on your inputs.\n")

# Get user's name
name = input("Enter your name: ")

# Get user's age
age = input("Enter your age: ")

# Get user's favorite animal
favorite_animal = input("Enter your favorite animal: ")

# Get user's favorite place
favorite_place = input("Enter your favorite place: ")

# Generate and print the story
print("\nOnce upon a time, there was a person named", name + ".")
print(name, "was", age, "years old and loved", favorite_animal + ".")
print("One day,", name, "went to their favorite place, which was", favorite_place + "."
print(name, "had a wonderful time there and felt happy.\n")

# Conclusion
print("The end! Thank you for using the Personalized Story Generator.")

# End of the program
```

Input:

Enter your name: Ashraful
Enter your age: 22
Enter your favorite animal: Cat
Enter your favorite place: Mecca

Output:

Once upon a time, there was a person named Ashraful.
Ashraful was 22 years old and loved Cat.
One day, Ashraful went to their favorite place, which was Mecca.
Ashraful had a wonderful time there and felt happy.

Congratulations , If you've completed this day. It was a great day. Stay tuned till the end. Good Bye !!!!

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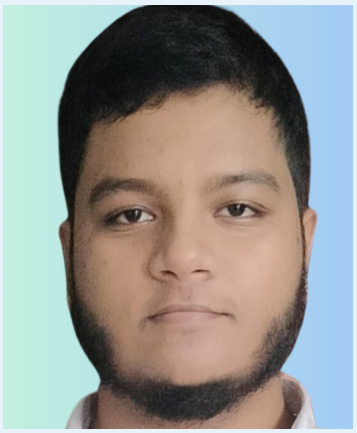

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Profile Link: https://www.linkedin.com/in/ashraful-islam-mahi/

Group link: https://lnkd.in/gr3QdnKR

Page Link: https://lnkd.in/g8A3qRwv

Github Repository: https://github.com/aimG313/challange_01_Full_Python_with_DSA-_in_100_days