

- Python
- Data Science
 - Web Scraping
 - Python Scripting
 - Game Dev
 - Web Design
 - OOPs
 - Automation
 - API
 - GUI Dev
 - Web Dev

Day-1.

Printing, Commenting, Debugging, string Manipulation and Variables.

Replit \Rightarrow Browser based code editors

```
print("Hello world!")
```

Hello world!

```
print(" " ) or ( ' ' )
```

\rightarrow what I need to print? (statement)

Anything that comes under single or double quote

- string

```
print("Hello world!")
```

\rightarrow Syntax Error (quote)

\rightarrow color of the parenthesis vary (like hint) \rightarrow Syntax High light

```
Print("Hello world!")
```

\rightarrow Syntax Error (parenthesis)

\Rightarrow Copy the error line: Syntax Error

\downarrow
Stackoverflow.com (solution)

Auditorium \Rightarrow check the instruction & the
o/p (auditorium.ai)

Print Modifiers

print("she said: "Hello" and then left.") → Error

↓

print('she said: "Hello" and then left.')

<or>

print("she said: 'Hello' and then left.")

<or>

print("she said: \\\"Hello\\\" and then left.")

Ex:-

print("A 'single quote' inside a double quote")

print('A "double quote" inside a single quote')

print('Alternatively, you can just \'escape\'
the quote')

Multiple line to print:-

print('Hello world')

o/p Hello world

print('Hello world')

⇒ Hello world

print('Hello world')

Hello world

sol:-

print('Hello world!\nHello world!')

Hello world

\n → new line

Hello world

print('Hello world!\nHello world!\nHello world')

Hello world!

Hello world!

Hello world!

Concatenation:-

→ Concatenation

print("Hello" + "Prem") → HelloPrem

sol) print("Hello" + "Prem") → Hello Prem

print("Hello" + "Prem") → Hello Prem

print("Hello" + " " + "Prem") → Hello Prem

spacing is very important in Python language.

`print("Hello world!")` → Indentation errors
↳ But usually works fine in recent versions

debugging :-

```
print("Day 1 - String Manipulation")  
print("String concatenation is done with the  
      '+' sign.")  
print('eg. print("Hello" + "world")')  
print(("New lines can be created with a backslash  
      and n."))
```

Input function :-

How come as a user, can we share the data?

```
print("What is your name?")
```

↓,
What is your name?

Here it will display the statement, that we are giving inside the quote. Still how? — Input

```
input("What is your name?")
```

↓, ↳ prompt

What is your name? → cursor will be here to expecting? Ans from user.

```
print('Hello' + input('What is your name?'))
```

Hello Premnand

Thonny IDE → thonny.org

↳ This IDE helps us to understand step by step process visually in a better way

Comment :-

- Completely ignored by the computer while executing
- It helps us to understand the statement

`#` or `'''` or `"""` → comment (or) `#`

Ex:-

Inputs

Jane

Ben

Tom

Print(input(' '))

=> Print(input(' '))

Print(input(' '))

len function

len()

↳ text in string

calculates no. of characters in strings

name = input()

Print(len(name))

(or) Print(len(input()))

↓

9

eg) Premnand
9

Variables:-

input("what is your name? ")

So here we will be getting some answer from the user, but what is the use? where it get stored? it disappears! we cannot use the data for the future!

name = input("what is your name? ")

↑

variable

Premnand

stored

Print(name)

Exp: You are writing some phone no of your friend, in a book, after some months if you see the no, we cant remember without name

7358679961 → ??

Prem - 7358679961

↳ variable

name = "Anand"

print(name)

name = "Prem"

print(name)

overwrite

Ex: Swapping the values

a = input()

b = input()

c = a

a = b

b = c



c = 29

a = 41

b = 29

print("a:" + a)

print("b:" + b)

29 → 41 | Hello → world
41 → 29 | world → Hello

Naming Variable:-

- make the code readable
(instead of a, b, c, name as name, age...)
- no space between, if you need use '_'
- numbers can be used but not beginning
- don't use name of functions, keywords like print, input
- case sensitive
- spelling mistake

Q12:

① which line of python code is valid?

var a = 12 X

a = 12 ✓

a: 12 X

12 = a X

② which is the best variable name for Player's username?

Pl username = "jackbauer" X

1-player_username = "jackbauer" X

Player1_username = "jackbauer" ✓

Plu = "jackbauer" X

which block of code will produce an error? for extra points, which type of errors do you think it will produce?

```
time_until_midnight = "5" X
```

```
print("There are " + time_until_midnight + " hours  
until midnight")
```

```
num_hours = "5" ✓
```

```
print("There are" + num_hours + "hours until midnight")
```

```
time_until_midnight = "5" ✓
```

```
print("There are" + time_until_midnight + "hours until midnight")
```

Project Band name generator:-

```
print('Welcome to the Band name generator!')
```

```
city = input('which city you grew up? \n')
```

```
pet = input('what is the name of the pet? \n')
```

```
print('The Band name is' + city + pet)
```