

# 100 days of Python Programming

## Day-1

### 1. Printing first program

`print("Hello World!")` -> Print anything inside the parentheses

`print("Hello Ayyappan!..")`

- printing Hello Ayyappan! -> keyword is **print**
- print is used to printing the data given by the user
- " " is used to remove unwanted spaces in strings

-> Use stackoverflow to get answer for any errors in your program

### Errors

- Syntax Error
- Indentation Error

### Challenge - 1

Write a program in `main.py` that prints the same notes from the previous lesson using what you have learnt about the Python print function.

Expected Output:

Day 1 - Python Print Function

The function is declared like this:

`print('what to print')`

### Answer:

`print("Day 1 - Python Print Function")`

`print("The function is declared like this:")`

`print("print('what to print')")`

## 2. String Manipulation

```
print("Hello World! \nHello world! ")
```

-> \n used to print the word 2 times without using print 2 times.

-> \n will be used to separate two characters in two lines

## 3. Concatenate

```
print("Hello" + "Ayyappan")
```

-> there is space between hello and ayyappan

Adding space in 3 ways

```
print("Hello" + " Ayyappan") or
```

```
print("Hello " + "Ayyappan") or
```

```
print("Hello" + " " + "Ayyappan")
```

**Challenge-2** -> Debug the Code

```
print("Day 1 - String Manipulation")
```

```
print("String Concatenation is done with the "+" sign.")
```

```
print('e.g. print("Hello " + "world")')
```

```
print(("New lines can be created with a backslash and n."))
```

**Answer:**

```
print("Day 1 - String Manipulation") # " is missing
```

```
print('String Concatenation is done with the "+" sign.') # use single quote  
to avoid error
```

```
print('e.g. print("Hello " + "world")') # avoid space at beginning  
(indentation error)
```

```
print("New lines can be created with a backslash and n.") # remove ( at  
first.
```

#### 4. Python Input Function

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

-> getting input from a user

#### 5. Comment

-> # is used to comment and python will not read the program you enter with #

#### Challenge-3

Write a program that prints the number of characters in a user's name.

**Answer:**

```
print(len("Ayyappan")) # or  
print(len(input("What is your name? ")))
```

#### 6. Python Variables

```
name = input("Enter your nice name here: ")
```

-> here name is a variable

```
print(name)
```

```
name = input("Enter your nice name here: ")  
length=len(name) # length is also a variable  
print(length)
```

-> print text in next line \n

```
name = input("What is your name? ")  
age = input("please enter your age: ")  
print(name)
```

```
print(age)
print("Your name is: " + name + "\n" + "Your age is: " + age)
```

### Challenge-4

Write a program that switches the values stored in the variables a and b. a=3,b=5 Output: a=5, b=3

**Answer:**

```
a = input("a: ")    -> get input from user
b = input("b: ")
c = a               -> assign a value to new variable c
a = b               -> assign b value to a
b = c               -> assign c value to b
print("a: " + a)
print("b: " + b)
```

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## Day-1 Practise Final Project

### Band Name Generator

```
print("Welcome to the Band Name Generator.")
city_name = input("What's name of the city you grew up in?\n")
pet_name = input("What's your pet's name?\n")
print("your band name could be " + city_name + " " + pet_name)
```