Day - 1

**Variables in python**

Printing, commenting, Debugging, String manipulation and variables.

**1.1 print(), string and Debugging**

* Printing: **print**("Hello world")
* string: "Hello world". Use singe quote inside double quote: vice versa.
* Error debugging: Copy the error massage and Google it.
* Exercise 1.1: Print the following massage:

Day 1 – Python print Function

The function is declared like this:

Print('what to print');

Indentation error: Place proper spaces, tabs, new-line etc.

|  |  |
| --- | --- |
| **print**("Day 1 – Python print Function")    **print**("The function is declared like this:")  **print**("Print('what to print')") | Following gives indentation error  **print**("Day 1 – Python print Function")  **print**("The function is declared like this:")  **print**("Print('what to print')") |

**1.2 String manipulation**

|  |  |
| --- | --- |
| Escape sequence:  **print**("Day 1 – Python print Function \nThe function is declared like this: \nPrint('what to print'")  Concatenated string:  **print**("This is" + " My December")   * Exercise 1.2: Bug fix following:   #Fix the code below  print(Day 1 - String Manipulation")  print("String Concatenation is done with the sign.")  printCe.g. printC'Hello " ♦ "world")')  print(("New lines can be created with a backslash and n.M)  **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.") |  |

**1.3 Inputting data, String Length**

**input**("prompt message: ")

* When data is inputted **input**("prompt message: ") is replaced by the data.
* All inputs (including number) are considered as string

Eg: **print**("hello ::" + **input**("Your name ? "))

* Notice, *recurrent* *function* is occurring here behind the scene.
* Commenting: use "#" sign. Eg: #this is a comment
* String Length: To get the length of a string, use the ***len()*** function.

a = "Hello, World!"

**print**(**len**(a))

* Exercise 1.3: Enter a string and its length is output. Following has 3-nested functions:

**print**( **len**( **input**("Your name ? ")))

**1.4 VARIABLEs and Variable naming**

No keyword is needed to declare a variable in *py*. The variable is *"dynamic-type".* Usual *variable* naming rules applied, similar to *Javascript*.

name = **input**("What is your name ? ")

**print**("Hello " + name)

name = "Bindu"

**print**("name changed to: " + name)

**1.5 String conversion str()**

name = **input**("What is your name ? ")

**print**("Hello " + name)

name\_length = **len**(name)

#*to concatenate length of name must be a string. So****str()****is used*

**print**( "Length of " + name + " is = " + **str**(name\_length) )

* Exercise 1.4: Switch values using variables

# Don't change the code below a = input("a: ")| i

a = input("a : ")

b = input("b : ")

# Don't change the code above

#################################;

#Write your code below this line

#Write vour code above this line

solution

#*Don't change the code below a = input("a: ")| i*

a = **input**("a : ")

b = **input**("b : ")

#*Don't change the code above*

#*################################;*

#*Write your code below this line*

c = a

a = b

b = c

#*Write vour code above this line*

#*Don't change the code below*

**print**("a = " + a)

**print**("b = " + b)

#*Don't change the code above*

* Exercise 1.5: Band name generator:

You're going to learn about

|  |  |  |
| --- | --- | --- |
| 1. printing, | 1. inputting, | 1. commenting, |
| 1. debugging, | 1. name, | 1. error, |
| 1. syntax errors, | 1. string manipulation, | 1. variables |

#1. Create a greeting for your program.

#2. Ask the user for the city that they grew up in.

#3. Ask the user for the name of a pet.

#4. Combine the name of their city and pet and show them their band name.

#5. Make sure the input cursor shows on a new line, see the example at:

# https://band-name-generator-end.appbrewery.repl.run/

#*1. Create a greeting for your program.*

#*2. Ask the user for the city that they grew up in.*

#*3. Ask the user for the name of a pet.*

#*4. Combine the name of their city and pet and show them their band name.*

#*5. Make sure the input cursor shows on a new line, see the example at:*

#*https://band-name-generator-end.appbrewery.repl.run/*

**print**("\n\n -- Hi! Welcome to Band Generator -- \n\n")

**print**(" To generate The Band name, we need some info. \n \t Give answer to following questions :\n\n")

city = **input**(" 01 - Name the city that you grew up in : \n\t")

pet = **input**(" 02 - What is the name of your pet : \n\t")

**print**("\n\n your BAND name would be : '"+ pet +" "+  city + "'")