--BASIC--

>>>>> Printing in Python<<<<<

```
print("Hello World") #double quote
print('hello World') #single quote
print("My name is Ucchash Sarkar") #double quote
print("I am from 'Dhaka', 'Bangladesh'")
#single quote inside double quote
print("""I am a undergrad student at "Aust, majoring in 'EEE'"
""") #single and double quote inside triple quote
```

>> Adding a comment:

#single line comment (use #hash)

#multi line comment: (use triple quote)

"""
Multiline
Comment
"""

>>>>> Expressions vs Statements <<<<<

```
iq = 100
user_age = iq/5
```

#expression produces a value.
#here "iq/5" produces a value which is the expression
#statement is the entire line of code which performs some sort of action.
#here, "user_age = iq/5" or "iq = 100" is a statement

>>>>>Accepting a input<<<<<

```
name = input("Please enter your name: ")
print("Good Morning " + name)

age = input("Please enter your age:")
print(name + "is " + age + " years old ")
```

>>>>>Data Types in Python<<<<<

Fundamental Data Types:

>> Numbers –

int - integers
#float – floating
#bool – Booleans

>>str - String
>>list- List
>>tuple - Tuple
>>dict - Dictionary
>>None - absence of a value

Creating our own Data Types:

- Using classes.

Specialized Data Types:

-not built in into python
-special "packages" and "modules"
-we can use from libraries.

>>Know the Data Types:

```
int(x) #integer
float(x) #floating
bool(x) #boolean
str(x) #string
list(x) #list
tuple(x) #tuple
dict(x) #dictionary
set(x) #set
```

Example01:

```
name = "Grocery list"
detail = 'Buy from supershop'
number_of_items = 5
budget = 2500 #taka
amount_of_rice = 1.50 #kg
should_we_buy_today = True

#know the types:

print(name, type(name)) #String
print(detail, type(detail)) #String
print(number_of_items, type(number_of_items)) #integer
print(budget, type(budget)) #integer
print(amount_of_rice, type(amount_of_rice)) #float
print(should_we_buy_today, type(should_we_buy_today))
#boolean
```

>> Type conversion:

```
name = input("Please enter your name: ")
print("Good Morning " + name)

age = input("Please enter your age:")
print(name + "is " + age + " years old ")


age_after_ten = (age +10) #cannot combine two different types
print(age_after_ten)      #shows error

age_after_ten = (int(age) +10) #convert int the string into
integer to combine them
print(age_after_ten)
```

>>>>>Variable Assignments<<<<<

#names cannot start with a number
#can’t use "space"
#use lowercase (best exercise)
#cannot use built-in names (python will highlight that, so we can know, example: for, class, is, finally, return etc.)

don’t use Camel case assignments:

```
amountOfRice = 3.33
print(amountOfRice)
```

use Snake case assignments:

```
amount_of_rice = 3.66
print(amount_of_rice)
```

#Python is a Duck type language:

#Python uses "Dynamic Typing" not "Static Typing" language.

#"Dynamic type" means we can use a name for both string or integer or list or.. any type assignments

Example01:

```
my_example = 2
my_emample = 2.5

my_example = "BlaBlaBla"
my_example = ["Antu" , "Sarkar"]
```

so, we can use a same name for both floats, strings, integers, lists and so on…

>> Unicode point representation of the passed argument:

```
print(ord('b'))
print(ord('B'))
```

>> identity function (returns memory location):

```
a = 10
print(id(a))
print(id(10))
b = a
print(id(b))
c = 5
print(id(c))
```

---END---