



# INDIAN SCHOOL AL WADI AL KABIR

<b>Class: VIII</b>	<b>Department: Computer Science</b>	<b>Year: 2025-2026</b>
Handout	Subject: Computer Science Topic: Basics of Python	

1. What are the features of Python?
  - a. Python is an open source language and free of cost
  - b. Python is easy to learn, code and implement
  - c. python is fast ,flexible and portable
  - d. Python supports multiple domains.
2. What is the difference between interactive mode and script mode.

Interactive mode: Interactive mode is a command line shell which gives immediate result for each command. In Interactive mode, we type one command at a time. Python executes the given command and gives the output.

Script mode: The interactive Mode does not save the commands entered by the user in the form of a program. The script mode save the commands entered by the user in the form of a program.
3. Write any three applications of Python
  - a) Python can be used to create web applications.
  - b) Python can be used for AI development.
  - c) Python can be used to handle complex mathematics.
4. What is an error? Explain with the help of its types.

Error is a term uses to describe any concern that arises unexpectedly in a computer , as a result the computer could not function properly.

Hardware Error : A hardware error is a malfunction of a hardware component such as CPU, RAM, etc., in a computer system.

Software Error : Software errors result due to fault in a computer program.
5. What are datatypes in python? Write the name of any three data types  
Data types are the classification or categorisation of data items. It represents the kind of value that tells what operations can be performed on a particular data.  
Some of the data types are Numeric, Boolean, Set, etc.
6. Name and define any 3 types of operators are in python?  
There are various types of operators used in Python, some of them are:  
Arithmetic Operators: Arithmetic operators are used to perform mathematical operations like addition, subtraction, multiplication etc.  
Assignment Operators: Assignment operators (=), are used to assign values to variables. It assigns values from the right-side operands to the left-side operands.  
Comparison Operators:  
Comparison operators are the operators that compare the values on either side of the symbol. Depending on their operation, these checks if the two operands satisfy the given condition. Then return either “True” or “False” based on the result.

7.



Expression	Operator	Meaning
$3x+1$	Addition	Add two operands together
$2x//5y$	Floor Division	Division that results into the whole-number adjusted to the left in the number line
$4p+3q$	Addition	Add two operands or unary plus
$ab/32c$	Division	Divide left operand by the right one
$3.2x**5h$	Exponentiation/ Power Operator	A type of Multiplication where a value is multiplied with itself for a certain number of times
$3t *48y$	Multiplication	Multiply two operands

a) In the expression  $3x + 1$  , which operator is used?

Ans: Addition

b) What type of operator is used in  $2x // 5y$ ?

Ans: Floor Division

c) Identify the operator in  $ab / 32c$ .

Ans : Division

d)  $3.2x ** 5h$ , which operator is used?

Ans: Exponentiation

e) What operator is used in  $3t * 48y$ ?

Ans: Multiplication

8. Application based questions

1 .Ravi is not very good in coding.Ravi has written below a statement to display his name.  
Print("My name is Ravi")

What do you think will it execute or will display an error?

Ans:It will display an error.

2.Simran has written the following code to show addition of a number with 10.

```
Num=int(input("enter the number"))
```

```
Print(Num+10)
```

But this code is showing error,write the reason behind this.

Ans:In the first line of the code ,she did not close the double quotation marks("")

9.Write the output of the following:

a)A, B, C = 20, 12/4,16+5

```
print(A, B, C)
```

Ans: 20, 3.0, 21

b)x='Stem'

y='Robo'

```
print(x+y)
```

Ans:StemRobo

c) x=15.4

y=3.2

```
print(x-y)
```

```
print(x*2)
```

```
print(x/y)
```

Ans: 12.2

```
30.8
4.81
d) x=-10
y=10
print(x>y)
print(x<y)
print(x==y)
```

Ans: False  
True  
False

```
e) x='apple'
y=orange
print(x>y)
print(x<y)
print(x==y)
```

Ans: False  
True  
False

```
f) x=12
y=7
z=10
print(x>y and z>x)
print(x>y or z>x)
print(not x>y)
```

Ans: False  
True  
False

10. Write the difference between input and output statement in python?

Input statement:

An **input statement** in Python is used to take data from the user. It allows the program to receive information while it is running. The function used for input in Python is `input()`. The value entered by the user is usually stored in a variable for further use in the program.

Output statement

An **output statement** in Python is used to display data or results to the user. It shows messages, values, or the results of calculations on the screen. The function used for output in Python is `print()`.