

Ch 7:Python Fundamentals & Ch 8:Data Handling

1. What is Type Casting. Name and explain both type of Type Casting.
2. Explain mutable and immutable data types.
- 3.. Type the following program in python idle , run and prepare the file output with code .

- a) Python Program to Print Hello world!
- b) Python Program to Add Two Numbers
- c) Python Program to Find the Square Root
- d) Python Program to Calculate the Area of a Triangle
- e) Python Program to Solve Quadratic Equation
- f) Python Program to Swap Two Variables
- g) Python Program to Generate a Random Number
- h) Python Program to Convert Kilometers to Miles
- i) Python Program to Convert Celsius To Fahrenheit
- j) Python Program to Check if a Number is Positive, Negative or 0
- k) Python Program to Check if a Number is Odd or Even
- l) Python Program to Check Leap Year

Q2 Explain the following.

- a) What is None literal in Python?
- b) What is the error in following code: `x, y = 7` ?
- c) what will the following code do: `a=b=18` ?
- d) What is the difference between a keyword and an identifier?
- e) What are literals in Python? How many types of Literals allowed in Python?
- f) How many types of sequences are supported in Python?
- g) What is the difference between an expression and a statement in Python?
- h) What are tokens in Python? How many types of tokens allowed in Python?
- i) How many types of strings are supported by Python?

Q3. Write in short

1. Who has developed Python programming Language? In which year it was developed?
- 2 On what basis python has been named? 1
- 3 Explain any three merits of Python. 3
- 4 Explain any three demerits of Python. 3
- 5 Why Python is called a cross-platform language? 1
- 6 Give full form of Python's IDLE. 1
- 7 What do you mean by IDE? Explain. 2
- 8 Name a few Python IDEs. 2
- 9 Why Python is called an interpreted language
10. Give an example each of following: i. Assigning same value to multiple variables. ii. Assigning multiple values to multiple variables.
11. What is dynamic typing?
12. Explain the use of `input()` function with an example.
14. What type value is returned by `input()` function? If the integer or float values are to be input write an example statement how will you use `input()` function?
15. Explain with example how to use `print()` function to:
 - i. Print Single string or variable's value.

- ii. Print multiple strings or variable's value or combination of both.
- iii. Specify the separator in between multiple output strings.
- iv. Specify end character after string output.

16. Consider following code:

```
print("Kendriya")
print("Vidyalaya")
```

Ch 9: Flow of control

1. Write a program to accept an integer(1-7) and print the day corresponding to it. (1- Sunday, 2- Monday, ,7- Saturday).
2. Write a menu driven program to input a choice from user. If choice is 'S', program should find the volume of a sphere. If choice is 'C' it should find volume of a cylinder. Otherwise error message
3. Write a menu driven program to accept a choice from the user(1-4). If the choice is 1, input a character and check whether it is uppercase, lowercase or other character. If the choice is 2, input a number and check whether it is even or odd. If the choice is 3, input a character(A or S or W or R)and print the corresponding season(A-Autumn, S-Summer, W-Winter, R-Rainy) using switch ...case. If the choice is 4, it should exit from the program.
4. Write a program that prints minimum and maximum of five number entered by the user.
5. Write a program to check if the year entered by the user is leap year or not.
6. Write a program to find the grades of the student when grades are allocated as given in the table.

Percentage of Marks	Grade
Above 90 %	A
80 % to 90 %	B
70 % to 80 %	C
60 % to 70 %	D
Below 60 %	E

7. What is the difference between else and elif construct of if statement?
8. What is the purpose of range() function? Give one example.
9. Write a program that takes the name and age of the user as input and displays a message whether the user is eligible to apply for a driving license or not. (the eligible age is 18 years).
10. . Write a function to print the table of a given number. The number has to be entered by the user.
11. Write a program that prints minimum and maximum of five numbers entered by the
12. Write a program that requires the user to enter two numbers and an operator. It then carries out the specified arithmetical operation: addition, subtraction, multiplication or division of the two numbers. Finally, it displays the result.