21IT308PC	PYTHON PROGRAMMING LAB	L	T	P	C
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PREREQUISITES: A course on "Programming for Problem Solving".

COURSE OBJECTIVES

- To be able to introduce core programming basics and program design with functions using Python programming language.
- To understand the dictionaries and modules.
- To understand the high-performance programs designed to strengthen practical expertise.

COURSE OUTCOME

CO1: Able to understand the basic concepts of scripting and the contributions of scripting language

CO2: Ability to explore python especially Python Classes

CO3: Ability to implement a sorting methods, Charts and form validation using Python.

LIST OF EXPERIMENTS:

CYCLE 01:

1. Write a program to demonstrate different number data types in Python.
2. Write a program to perform different Arithmetic Operations on numbers in Python.
3. Write a program to create, concatenate and print a string and accessing sub-string from a given string.
4. Write a python script to print the current date in the following format "Sun May 29 02:26:23 IST 2017"
5. Write a program to create, append, and remove lists in python.
6. Write a program to demonstrate working with tuples in python.
7. Write a program to demonstrate working with dictionaries in python.
8. Write a python program to find largest of three numbers.
9. Write a Python program to convert temperatures to and from Celsius, Fahrenheit. [Formula : c/5 = f-32/9]
10. Write a Python program to construct the following pattern, using a nested for loop

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* * * *
* * * * *
* * * *
* * *
* *
*
```

LIST OF EXPERIMENTS: CYCLE 02:

11. Write a program that accepts the lengths of three sides of a triangle as inputs. The program output should indicate whether or not the triangle is a right triangle (Recall from the Pythagorean Theorem that in a right triangle, the square of one side equals the sum of the squares of the other two sides).
12. Write a python program to define a module and import a specific function in that module to another program.

LIST OF EXPERIMENTS: CYCLE 03:

13. Write a Python class to reverse a sentence word by word.
14. Write a python program to draw a line chart and Pie chart for give sample data.
15. Write a python program that implements the Quick sort method to sort a given list of integers in ascending order.
16. Write a python program to create a user interface to read hall ticket number from the student, after submitting a message should be displayed after validating.
17. Display the results of the given hall ticket (ref. experiment no.17) from data base table.