

GOVT. POLYTECHNIC, HAMIRPUR (H.P.)
Practical Planning

Branch: Information Technology
Subject: Python Programming Lab
Teacher: Ekta Sharma

Semester: 4th
Session: Jan-Jun 2024
Laboratory: CC1 Lab

Sr. No.	No of Practical hours planned	Aim of the Practical	Reference for Procedure/Writeup	Remarks
1	2	To install and configure Python 3 and IDLE on Windows/ Linux platforms.	P1, R2	
2	4	To practice arithmetic expressions on Python interactive shell.	R1, R2	
3	2	To write a program in Python to calculate the area and circumference of a circle. The input for the program must be entered by the user and the area, circumference should be formatted upto two decimal places.	R1, R2	
4	4	To create variables of different data types and verify it using type() function.	R1, R2	
5	4	To understand the concept of variable copies and references using id() function	P1, R2	
6	4	To apply slicing, concatenation, repetition and membership testing on lists, tuples and strings	P1, R2	
7	4	To practice various methods of lists, tuples, strings, ranges, sets and dictionaries	R1, R2	
8	4	To practice map(), filter(), all() and any() functions on lists.	R1, R2	
9	2	To create a list of squares of the first 10 natural numbers using list comprehension.	R1, R2	
10	4	To demonstrate dictionary comprehension.	R1, R2	
11	2	To demonstrate the working of if statement and its variants.	R1, R2	
12	2	To compute the factorial of a given number using a while loop.	P1, R2	
13	2	To navigate through the elements of a list using a for statement	R1, R2	
14	4	To demonstrate the exception handling mechanism of Python.	R1, R2	
15	2	To write a function to compute the greatest of two numbers.	R1, R2	
16	2	To demonstrate the use of continue, break and pass statements.	R1, R2	
17	2	To demonstrate named arguments and variable arguments and keyword arguments in Python functions	R1, R2	
18	2	To demonstrate lambda functions in Python.	R1, R2	
19	4	To copy the contents of one file into another using Python file handling functions and 'with' statement.	R1, R2	

References:

R1: Lab Manual

R2: <https://www.w3schools.com/python>

Ekta Sharma
Signature of Teacher with Date
(EKTA SHARMA)

Ekta Sharma
Signature of HOD