

SSN COLLEGE OF ENGINEERING

(Autonomous - Affiliated to Anna University)

DEPARTMENT OF CSE

UGE2197 PROGRAMMING IN PYTHON LABORATORY

Ex 2: Simple Python Programming – Sequential Construct

Part – A (Mandatory)

1. Get the following input from the user:

first name and last name.

Write a Python program to print as

Hello first name last name

Welcome to Python!

2. Assign $x = 8$ and $y = 2$. Evaluate the following expressions and write the output.

a) $x + y * 3$

b) $(x + y) * 3$

c) $x ** y$

d) $x \% y$

e) $x / 12.0$

f) $x // 6$

3. Print the following statements and note the output $52 + 2$ and “52” + “2”

4. Earth takes a period of revolution of 31558150 seconds. Write a program to convert these seconds into minutes.

For the following programs, use input () to get input from the user.

5. Write a program in python to add two numbers and print the result.

6. Write a program in python to find the area of a triangle.

7. Write a program in python to calculate simple interest.

8. Write a program in python to swap two numbers using simultaneous assignment.

9. Write a program in python to find quotient and remainder after division.

10. Write a program in python to determine the last digit of a given positive integer value.

11. Write a Python program to display the value of the base raised to that exponent. Your output should be in the following format:

What base? 10

What power of 10? 4

10 to the power of 4 is 10000

12. Write a program to find the net salary of an employee by getting the basic pay (BP) as input. Compute the net pay based upon the following formulae:

DA = 88% of BP

HRA = 8% of BP

CCA = Rs. 1000

Insurance = Rs. 2000

PF = 10% of BP

Gross Pay = BP + DA + HRA + CCA

Deductions = Insurance + PF

13. Write a program in python to solve a quadratic equation.

Part – B (Optional)

1. Light travels at 3×10^8 meters per second. A light-year is the distance a light beam travel in one year. Write a program that calculates and displays the value of a lightyear. [Light year = speed of light * number of seconds in a year]
2. Five Star Video rents new videos for \$3.00 a night and oldies for \$2.00 a night. Write a program that the clerks at Five Star Video can use to calculate the total charge for a customer's video rentals. The program should prompt the user for the number of each type of video and output the total cost.
3. An employee's total weekly pay equals the hourly wage multiplied by the total number of regular hours plus any overtime pay. Overtime pay equals the total overtime hours multiplied by 1.5 times the hourly wage. Write a program that takes as inputs the hourly wage, total regular hours, and total overtime hours and displays an employee's total weekly pay.
4. Write a Python program that prompts the user to enter an upper- or lower-case letter and displays the corresponding Unicode encoding.
5. Write a program to read two complex numbers from the user and find their sum, difference and product.