SLIIT
Discover Your Future

BSc (Hons) in Information Technology
Year 1

Tutorial 2

IT1010 – Introduction to Programming Semester 1, 2022

Exercise 1: Practice how to use variables in printf statement
What does the following print? Assume x = 2 and y = 3.

i. printf("*\n**\n***\n****\n*****\n");
ii. printf("%d", x + x);
iii. printf("x = ");
iv. printf("x=%d", x);
v. printf("%d = %d", x+y, y+x);
vi. /* printf("%d", x+y); */
vii. printf("\n");
viii. float z = 45.567;
printf("value is %.2f", z);

Exercise 2: Practice number formatting

a) What is the output of the following statements?

i. printf("%.2f\n", 3.446);

ii. printf("%.1f\n", 3.446);

b) Write statements to,

i. Print the value 123.4567 with 2 digits precision.

ii. Print the value 3.14159 with three digits to the right of the decimal point.

iii. Print the value 333.546372 in a field width of 15 characters with precisions of 1,2,3,4 and 5.

Exercise 3: Practice scanf statement in a C program

i. Write a C program to input two marks from the keyboard and display the marks.
ii. Modify the above program to calculate the total of the marks and display the total.
iii. Next, add a statement to calculate the average mark.
iv. Display the average mark.

Exercise 4: Practice using structures in C programs

Write a C program to do the following;

a) Create a structure called **item** to store the following details of items in a shop.

itemNo	integer
price	double
quantity	integer

b) Create 2 variables from the **item** data type and store the following data entered through the keyboard. Print the details on the screen in the following format.

Item No	Price	Quantity
1	10.00	12
2	15.00	4