

## CSD101: Lab Assignment -1

**Total Marks: 10x2=20**

1. Evaluate the following expression with 7 and 22 as operands by executing the corresponding C program.

- i.  $22/7$
- ii.  $7/22$
- iii.  $22 \% 7$
- iv.  $7 \% 22$

2. Assume that you have the following variable declarations:

int color, lime, straw, red, orange;  
float white, green, blue, purple, crayon;

Evaluate each of the following values:

color = 2, crayon = -1.3, straw = 1, red = 3, purple = 0.32

- i. white = color \* 2.5 / purple;
- ii. green = color / purple;
- iii. orange = color / red;
- iv. blue = (color + straw) / (crayon + 0.3);
- v. lime = red / color + red % color;
- vi. purple = straw / red \* color;

3. Draw following simple structure on your screen using the printf function.

- i. Circle

```
      *
    *      *
  *      *
```

- ii. Triangle

```
  /\
 /\  \
-----
```

iii. Rectangle



iv. Alphabets of your initials such as for the name ‘Sweta Mishra’, draw the shape for initials SM as follows (Use any symbol of your choice: \*, -, +, /, \$ etc )

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

4. Write a program that reads in three integers and then determines and prints the largest and the smallest in the group.
5. Write a program that reads in two integers and determines and prints whether the first is a multiple of the second. [use % operator.]
6. Write a program that prints the integer equivalent of some uppercase letters, lowercase letters and some special symbols.  
Ex: A B C a b c \* % / and the blank character.  
Hint: To print the integer equivalent of uppercase A we need to execute the following statement.  
`printf(“%d”, ‘A’);`
7. Consider a currency system in which there are notes of denominations Rs. 1, Rs. 2, Rs. 5, Rs. 10, Rs. 50, Rs. 100. If a sum of Rs. N is entered through the keyboard, write a program to compute the smallest number of notes that will combine to give Rs. N.
8. Any year is input through the keyboard. Write a program to determine whether the year is leap year or not. [use if-else and % operator]
9. Given the length and breadth of a rectangle, write a program to find whether the area of the rectangle is greater than its perimeter.
10. A five digit number is entered through the keyboard. Write a program to obtain the reversed number and to determine whether the original and reversed numbers are equal or not.