**Q1.** Write a program which performs the following calculations. You should make a constraint on user that he/she can’t enter value of N less than 5. **Use do loop only**

****

**Q2.** Write the output for the following code block. (**Variables**)

#include <stdio.h>

int main(void)

{

int i = 100;

i = i+i;

printf("\nValue1:\t%d \nValue2:\t%d\n", i+i, i);

return 0;

}

**Q3. Write the output of following and find the bug in code if any. (Variables)**

#include <stdio.h>

int main(void)

{

double i = 12, j = 5, avg;

avg = i+j/2;

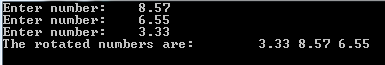
printf("Avg = %.2f\n", avg);

return 0;

}

**Q4.** You are part of a team who are working in chemistry lab. You measured the temperature of a chemical liquid. During writing the measurement you assigned the fraction parts of two columns A= 58.75 and B= 56.55 incorrectly. Now changing the whole column values are tedious task, so you are thinking that how can it be solved by writing a c code. Before writing c code for both columns correction you decide to write a small piece of code which can change the fraction part of variables only like A=56.75 and B= 58.55. Write the c program for the mentioned scenario.

**Q5.** write a program which takes three float values as input and store it in three variables (a, b, c). Now rotate them one place right for example if user stores 8.57, 6.55 and 3.33 in a, b, c respectively. Your written code should the values one place right like a, b, c will become 3.33, 8.57, 6.55. your output may look like as follows.



**Q6.** Write a program which takes float values from users and print the sum of their fraction and integer part separately. Use two double type only.

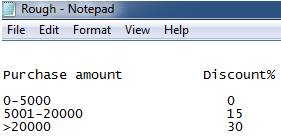
**Q7.**

write a program which take an integer as input from user and then round the number up/down on the last digit. for example, if user enter 13, program print 10 and if user enter 4 then print 0. if the user enters 355 then print 360. Your code should work for negative input as well in such way if user enters -45 then -40 will print. If user enters -32 then print -20.

**Q8. Conditions**

write a program which reads product purchase amount as input and calculate the discount as per

following table. Print the total discount and payable amount on screen. Use logical operators only



**Q9**

Consider your CSE141 midterm exam is marked by Mr. Hamza and Mr. Nadeem. If the difference of their marks is less than x, the final marks is their average. Otherwise, your midterm is reviewed by Mr. Basit as follows:

a) if the marks of Mr. Basit is equal to the average of Mr. Hamza and Mr. Nadeem, that is your final marks then.

b) if Mr. Basit marks are less than minimum of Mr. Hamza and Mr. Nadeem then you are assigned

the minimum marks.

c) Otherwise, the final marks are the average of Mr. Basit and the one among Mr. Hamza and Mr. Nadeem closest to.

write a program for the mentioned scenario which takes both instructors marks and the difference x and print the final grade according to procedure. Use if-else

**Q10.**

Write a program which takes an integer values as input from user and print the multiplication table of entered number. The user input must be in range(0-10) only. Use for loop only

**Q11.**

Implement the following formula in C language.

**1 + 3 + 5 + … + (2x - 1) = x2**

Verify the written formula by reading n as a positive integer input from the user. Use for loop and decision statement.