Assignment 3

Example 1:
```
#include<stdio.h>
main( )
{
     int a,b,c,d;
    printf("give two numbers");
    scanf("%d %d",&a,&b);
    c=a/b;
    d=a%b;
    printf("%d %d",c,d);
}
```
Here / is quotient and % is
remainder. 87/7 is 12. 87%7 is 3

Example 2:
```
#include<stdio.h>
main( )
{
    int a,b,c;
    printf("give a number");
    scanf("%d",&a);
    b=a%10;
    c=a/10;
    printf("%d %d",b,c);
}
```
a%10 finds last digit of a number.
a/10 deletes the last digit.

1.Write program to delete the last digit. input 13613 output 1361. input 324 output 32.

2. Write program to print the second last digit. Input 13613 output 1. Input 427 output 2.

3.Write program to double the last digit. e.g. input 23613 output 23616. input 324 output 328. (assume that last digit is less than 5)

Example1:
```
#include<stdio.h>
main( )
{   float a,b,m;
    printf("\nGive two numbers");
    scanf("%f %f",&a,&b);
    if (a>b) m=a;
    else   m=b;
    printf("%f is bigger",m);
}
```

Example2:

```c
#include<stdio.h>
#include<math.h>
main( )
{
    float a,b,c,det,r1,r2;
    printf("\nGive a b c");
    scanf("%f %f %f",&a,&b,&c);
    det=b*b-4*a*c;
    if (det<0) printf("Imaginary roots");
    else {
    r1=(-b+sqrt(det))/(2*a);        \\to use "sqrt" function add #include<math.h>
    r2=(-b-sqrt(det))/(2*a);
    printf("roots %f %f",r1,r2);
}
}
```

4. Write program, which reads an integer X and prints an integer Y. Y is X+15 if X is between 10 and 30. Y is 3*X if X is between 50 and 70. Otherwise Y is X-5.

5. Write program, which reads three numbers and prints the biggest.

6. A student is awarded Ex grade if he gets more than 90 marks. He is awarded A grade if marks are between 80 and 89. Similarly range for B, C, D and P are 70-79, 60-69, 50-59, and 35-49 respectively. The student is awarded F grade if he gets less then 35 marks. Write a program, which reads marks of a student and prints his grade.

7. Write program, which reads a, b and c as sides of a triangle and prints whether angle A is 90_0 or not. [Hint: if ($a^2 == b^2+c^2$)] [Do not use cos_1 etc]

8. Write program, which reads three numbers. Two of these are same and one of them is different. The program outputs the different number. e.g. input 5 5 2 output 2. Input 4 3 4 output 3. Input 5 2 2 output 5.

9. Write program, which reads 5 numbers a, b, c, d, and x. The program output how many among a, b, c and d are equal to x. e.g. input 5 7 9 7 7 output 2. input 5 3 8 7 2 output 0. input 5 2 2 2 5 output 1.

Use loop: Example:
```c
#include<stdio.h>
int main()
{
   int n,i;
   scanf("%d",&n);
   for(i=1; i<=n;  i++)
        printf("%d \t", i );
}
```
It prints : 1 2 3 4 5 6 ......upto n.

10. Write a program to find the sum of first n odd numbers where n is entered by user.

11. Write a program to find sum of all digits of number.
12. Write a program in C to display the multiplication table of a given integer.
For ex.
5*1=5
5*2=10;
  :
  :
  :
So on….