

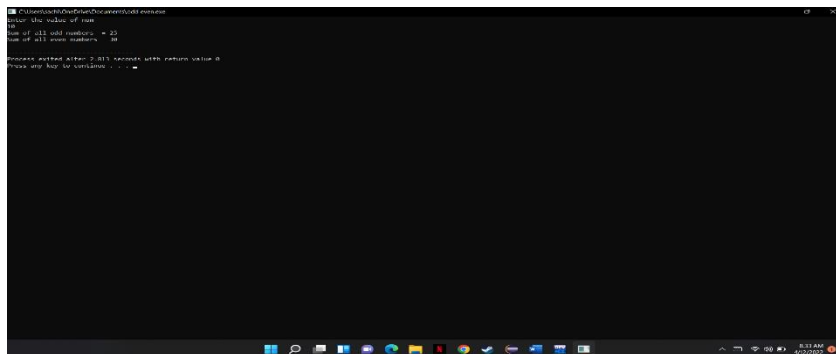
1)Write the program to find sum of odd and even?

```
#include <stdio.h>

Int main()
{
    int i,num, odd_sum= 0, even_sum=0;

    printf("Enter the value of num\n");
    scanf("%d", &num);
    for (i = 1; i <= num; i++)
    {
        if (i % 2 == 0)
            even_sum = even_sum + i;
        else
            odd_sum = odd_sum + i;
    }
    printf("Sum of all odd numbers = %d\n", odd_sum);
    printf("Sum of all even numbers = %d\n", even_sum);
}
```

OUTPUT



```
C:\Users\shubham\Documents>gcc sum.c
Enter the value of num
10
Sum of all odd numbers = 25
Sum of all even numbers = 30
Process finished with return value 0
Press any key to continue . . .
```

2)Find output of following program?

```
#include <stdio.h>

int magicsq(int, int [[10]);

int main( ){

    int size;

    int a[10][10];

    printf("Enter the size: ");

    scanf("%d", &size);

    if (size % 2 == 0){

        printf("Magic square works for an odd numbered size\n");}

    else{

        magicsq(size, a);}

    return 0;}

int magicsq(int size, int a[[10]]){

    int sqr = size * size;

    int i = 0, j = size / 2, k;

    for (k = 1; k <= sqr; ++k) {

        a[i][j] = k;

        i--;

        j++;

        if (k % size == 0) {

            i += 2;

            --j; }

        else {

            if (j == size) {

                j -= size;}

            else if (i < 0){

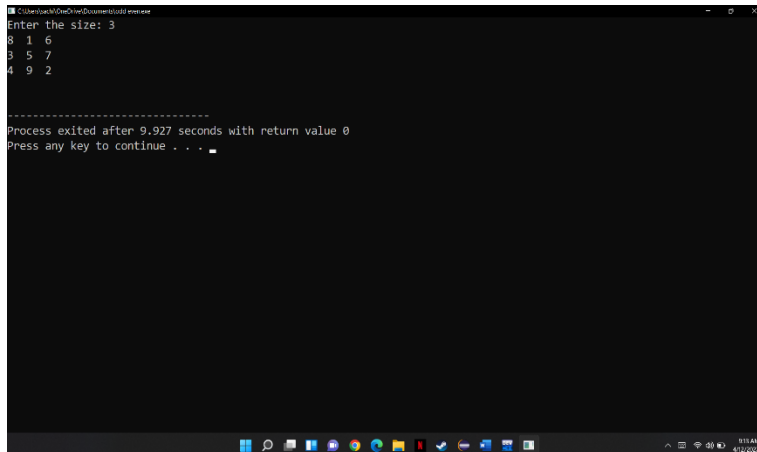
                i += size;}} }
```

```

for (i = 0; i < size; i++){
    for (j = 0; j < size; j++){
        printf("%d ", a[i][j]);
    }
    printf("\n");
}
printf("\n");

```

OUTPUT



```

C:\Users\ach\OneDrive\Documents>gcc.exe
Enter the size: 3
8 1 6
3 5 7
4 9 2

-----
Process exited after 9.927 seconds with return value 0
Press any key to continue . . .

```

3) Write a program to find the root of quadratic equation?

```

#include<stdio.h>
#include<conio.h>
#include<math.h>

int main()
{
    int a,b,c,disc;
    float x,y;
    printf("enter coefficient of x^2,x and constant terms:\n");
    scanf("%d%d%d",&a,&b,&c);
    disc=b*b-4*a*c;
    if(disc>0){

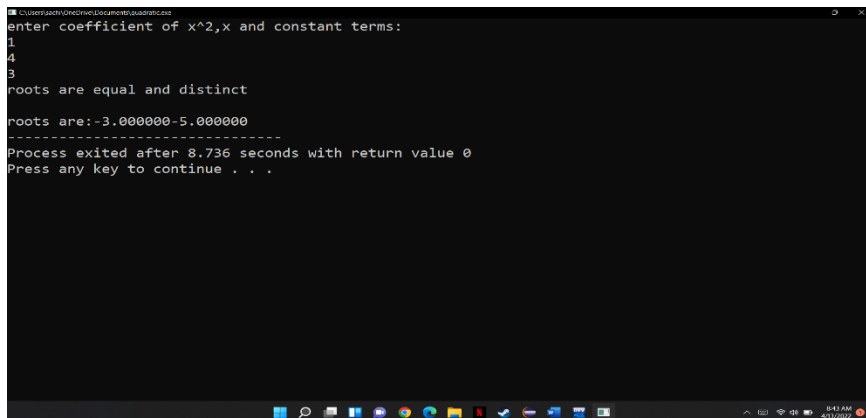
```

```

        printf("roots are equal and distinct\n");
        x=-b+sqrt(disc)/(2*a);
        y=-b-sqrt(disc)/(2*a);
        printf("\nroots are:%f%f",x,y);
    }
else if(disc==0){
    printf("both roots are equal\n");
    x=-b/(2.0*a);
    y=-b/(2.0*a);
    printf("root is %f%f",x,y);
}
Else
    printf("both roots are imaginary");
return 0;
}

```

OUTPUT



```

C:\Users\ASAD\Documents>gcc test.c
enter coefficient of x^2,x and constant terms:
1
4
3
roots are equal and distinct
roots are: -3.000000 -5.000000
-----
Process exited after 8.736 seconds with return value 0
Press any key to continue . . .

```

4) Write a program to find the digits in any number using do while loop?

```
#include<stdio.h>

int main()
{
    int n,i,count;

    printf("enter number\n");

    scanf("%d",&n);

    do{

        n=n/10;

        count++;

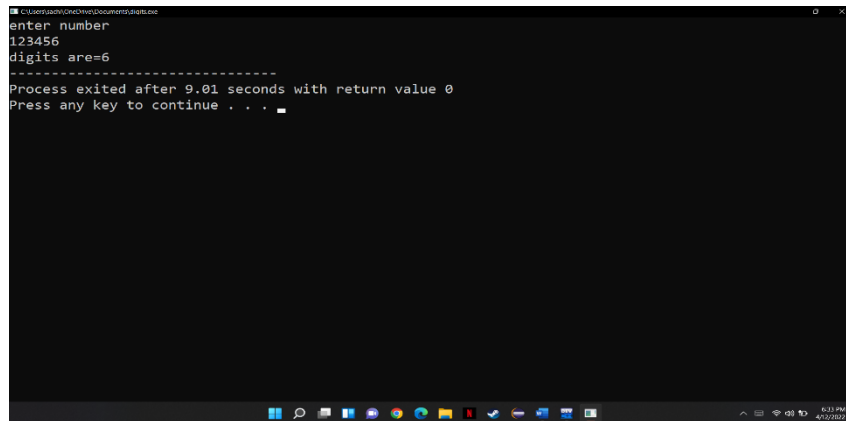
    }while(n!=0);

    printf("digits are=%d",count);

    return 0;

}
```

OUTPUT



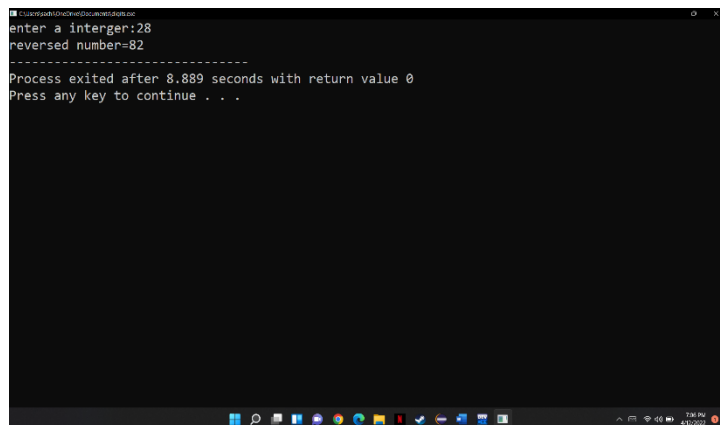
```
C:\Users\ashw\OneDrive\Documents\ashw.c
enter number
123456
digits are=6
-----
Process exited after 9.01 seconds with return value 0
Press any key to continue . . .
```

5)Find the output?

```
#include<stdio.h>

int main()
{
    int n,reverse=0,remainder;
    printf("enter a interger:");
    scanf("%d",&n);
    while(n!=0){
        remainder=n%10;
        reverse=reverse*10+remainder;
        n/=10;
    }
    printf("reversed number=%d",reverse);
    return 0;
}
```

OUTPUT



```
enter a interger:28
reversed number=82
-----
Process exited after 8.889 seconds with return value 0
Press any key to continue . . .
```

DISCUSSION AND CONCLUSION

Program 1

- I found that int must be used instead of void.

Program 2

- I found that int must be used instead of void.

Program 3,Program 4,Program 5 was error free.