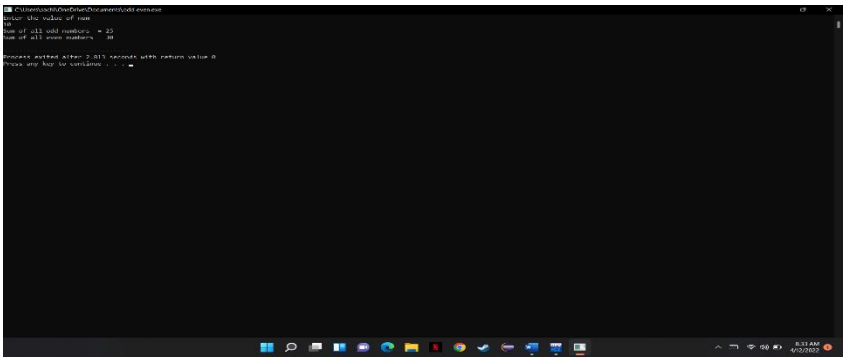
1)Write the program to find sum of odd and even?

```
 #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

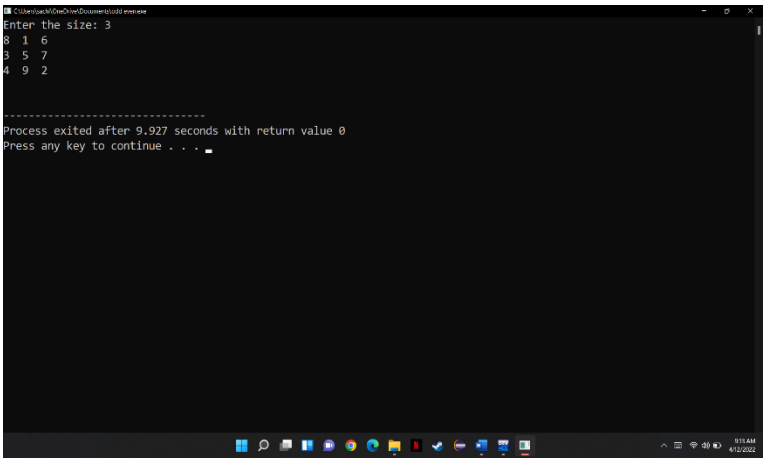


2)Find output of following program?

```
#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

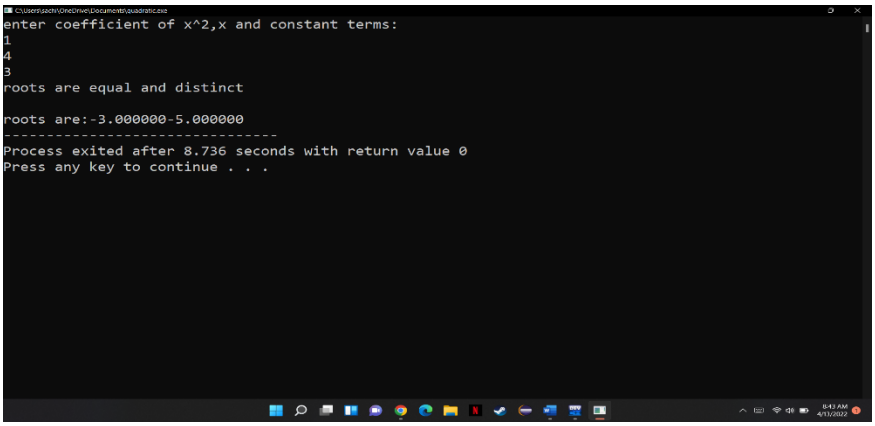


3)Write a program to find the root of quadratic equation?

```
#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;
}
```

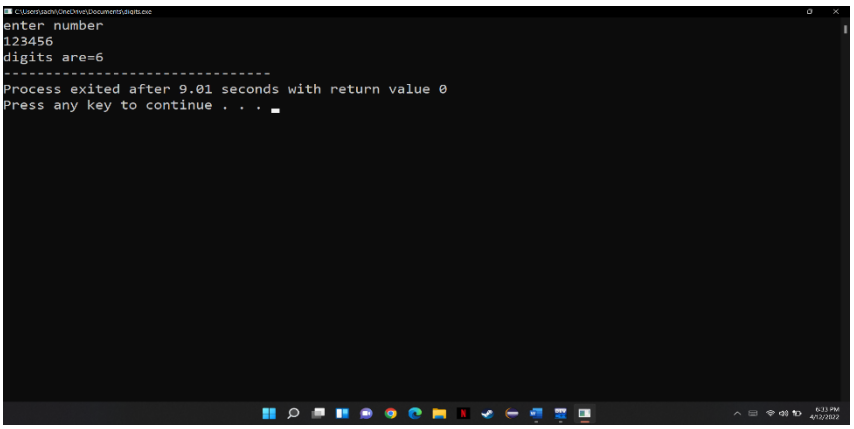
OUTPUT



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;
}
```

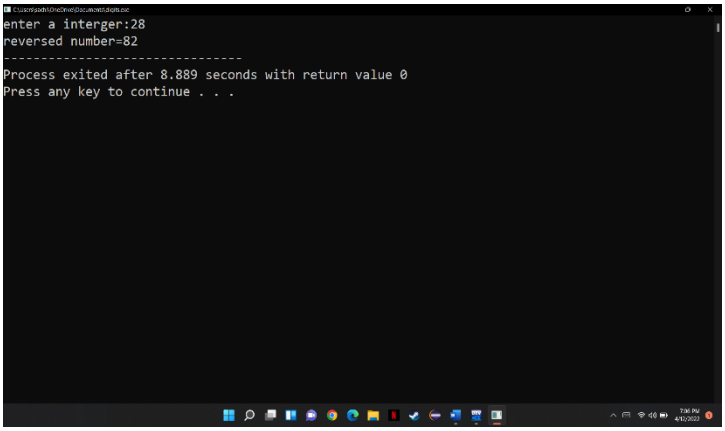
OUTPUT



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



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.