COMPUTER ASSINGMENT 3

Devendra gupta (AY1)

This is made by Devendra gupta.

Ths is submitted to miss. Gurpreet mam.

COMPUTER ASSINGMENT 3

Devendra gupta

```
#include<stdio.h>
#include<tension.h>
void main()
{
        mind = confused:
        while(study!=done)
        {
        paper=back;
        Parents=scold++
        }
        If(exam==pass)
        {
        Tension free;
        }
        else
        {
        Game over;
        }
```

DETAILS:

Class : AY1

Subject: COMPUTER

(CS) semester 1

Facality: Miss .

Gurpreet mam

DATE : 05|12|2023

(TUESDAY)

LANGUAGE : C

NO. OF CODES: 185

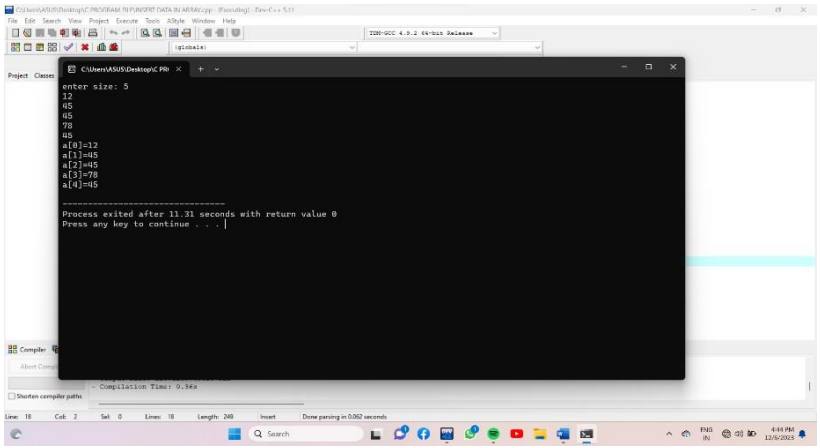
Class Roll no.-20

University-2315000726

Array:

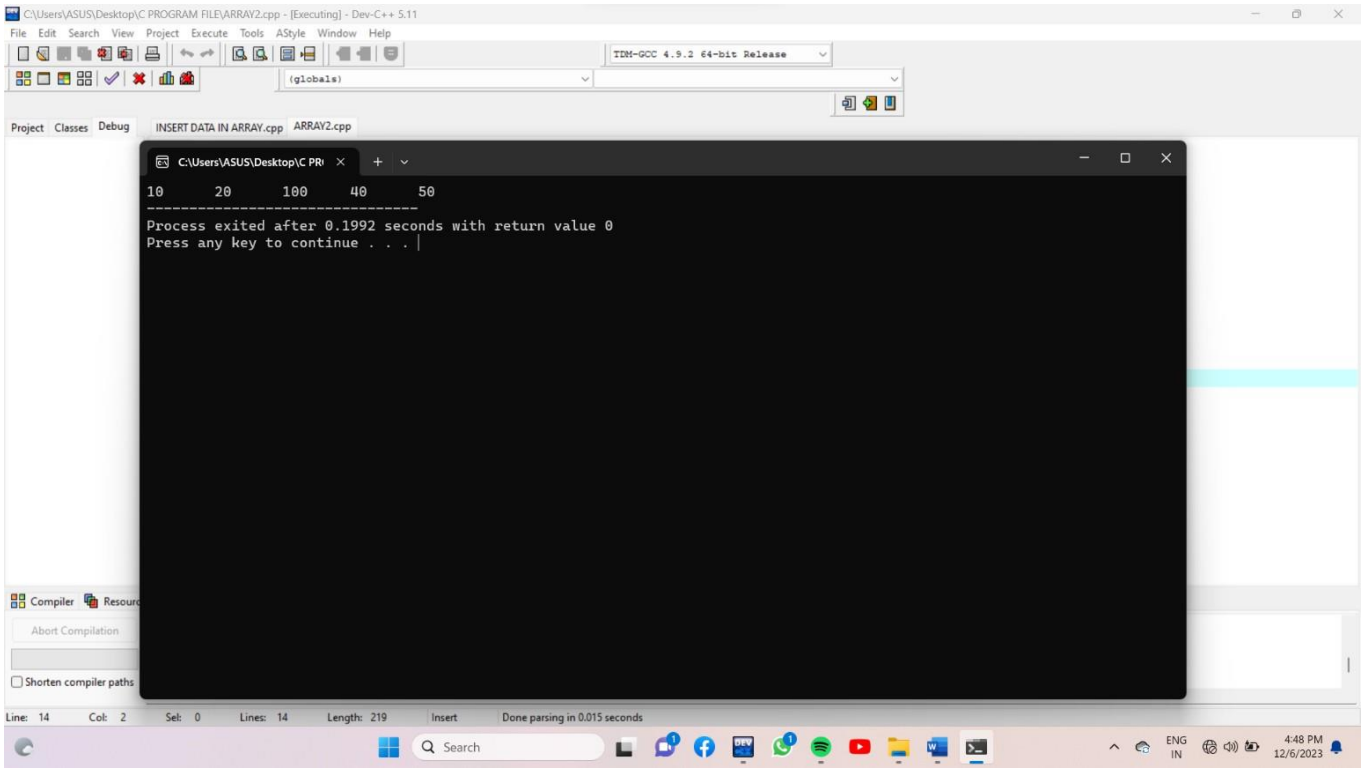
ques 1: WAP INSERT ELEMENT IN ARRAY?

```
#include<stdio.h>

#include<conio.h>

int main()

{

	int  n;

	int a[n];

	printf("enter size: ");

	scanf("%d",&n);

	for(int i=0;i<n;i++)

	{

		scanf("%d",&a[i]);

	}

	for(int i=0;i<n;i++)

	{

		printf("a[%d]=%d\n",i,a[i]);

	}

	return 0;

}
```



QUES2: WAP TO UPDATE ELEMENT IN ARRAY IN C LANGUAGE?

```
#include<stdio.h>

#include<conio.h>

int main()

{

	int a[5]={10,20,30,40,50};

	 a[2]=100;

	for(int i=0;i<5;i++)

	{

		printf("%d\t",a[i]);

	}

	return 0;
```

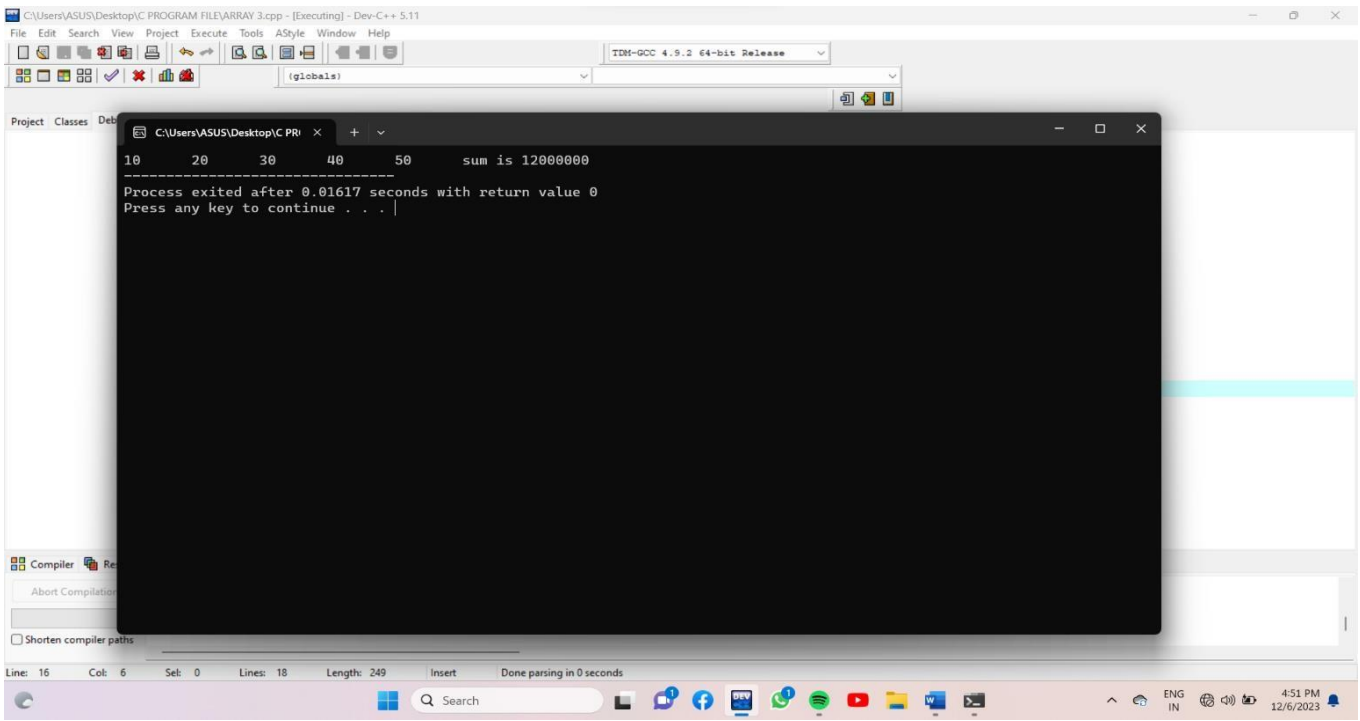



```
}
```

QUES 3: WAP TO ADD ELEMENT IN ARRAY?

```
#include<stdio.h>

#include<conio.h>
```

```
int main()
{		int n;
		int  a[n];
		printf("enter size: ");
		scanf("%d",&n);
		for(int i=0;i<n;i++)
		{  scanf("%d",&a[i]);
		}
		for(int i=0;i<n;i++)
		{
			printf("a[%d]=%d\n",i,a[i]);
		}
		printf(" sum is %d",sum);
		return 0;
}
```



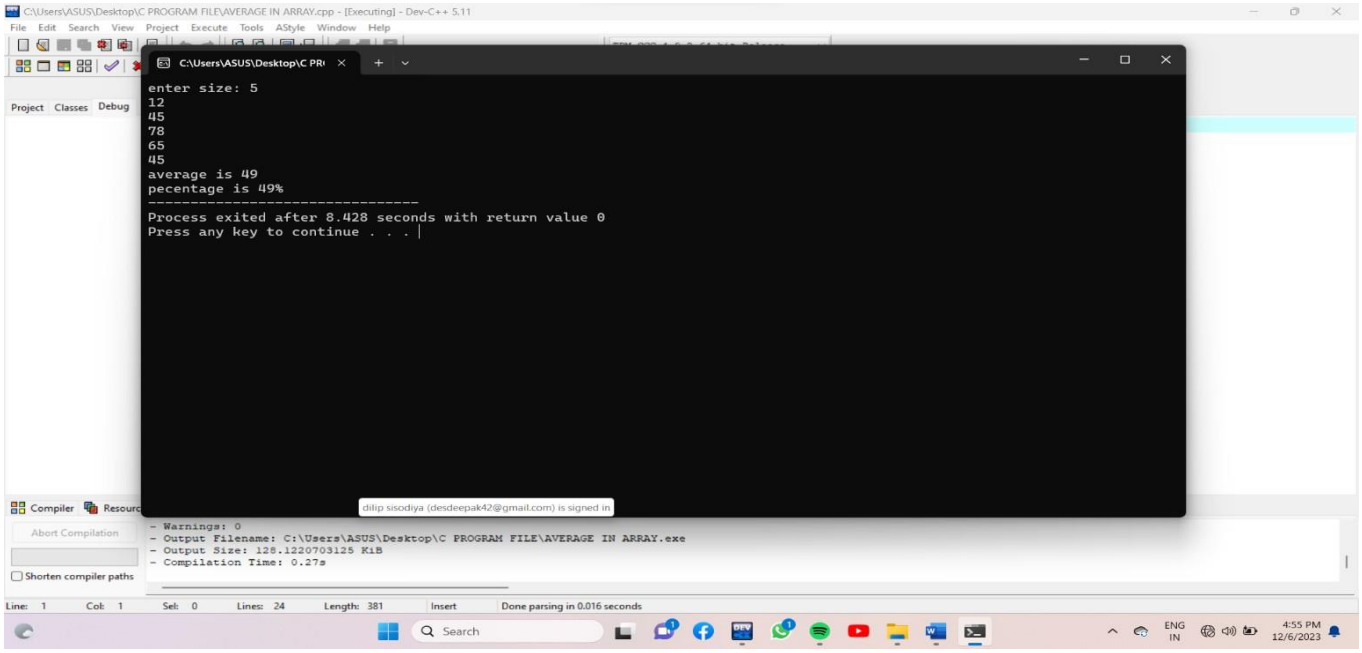
QUES5: WAP TO FIND ODD OR EVEN NUMBER IN ARRAY?

```
#include <stdio.h>

int main()

{

    int n,i,j;

    scanf("%d",&n);

    int a[n];


    for(i=0;i<n;i++)

    {

            printf("enter elements: ");

        scanf("%d",&a[i]);

    }

    for(j=0;j<n;j++)

    if(a[j]%2==0)

    {

            a[j]=0;

            }

            else

            {

                    a[j]=1;

            }

            for(int i=0;i<n;i++)

            {

                    printf("a[%d]=%d\n",i,a[i]);

            }

            return 0;

}
```

QUES : WAP TO FIND AVERAGE AND PERCENTAGE IN ARRAY?

```
#include<stdio.h>

#include<conio.h>
```

```
int main()
{
        int  n;
        int a[n];
        printf("enter size: ");
        scanf("%d",&n);
        for(int i=0;i<n;i++)
        {       scanf("%d",&a[i]);}
        int average;
        int  count=0;
        for(int i=0;i<n;i++)
        { count=count+a[i]; }
        average=count/n;
        printf("average is %d\n",average);
        int percentage;
        printf("pecentage is %d%%",average);
        return 0;
}
```

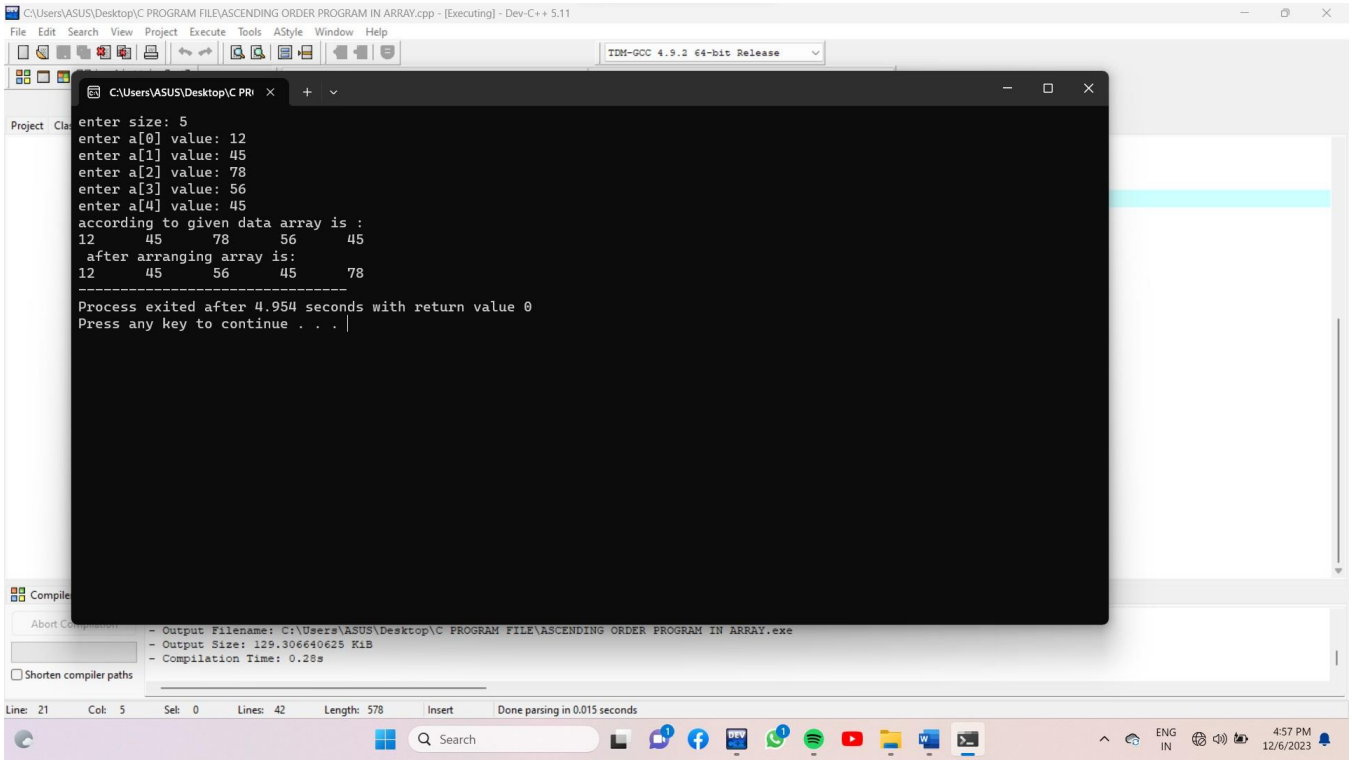


QUES : WAP TO REARRANGE ARRAY IN ASENDING ORDER?

#include<stdio.h>

```
#include<conio.h>
int main()
{
	int n;
	printf("enter size: ");
	scanf("%d",&n);
	int a[n];

	for(int i=0;i<n;i++)
	{
		printf("enter a[%d] value: ",i);
		scanf("%d",&a[i]);
	}
	printf("according to given data array is :  \n");

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

	int flag;

	for(int i=0;i<n-1;i++)
	{
		if(a[i]>a[i+1])
		{
			flag=a[i+1];
			a[i+1]=a[i];
			a[i]=flag;
		}
	}
		printf("\n after arranging array is:\n");
```

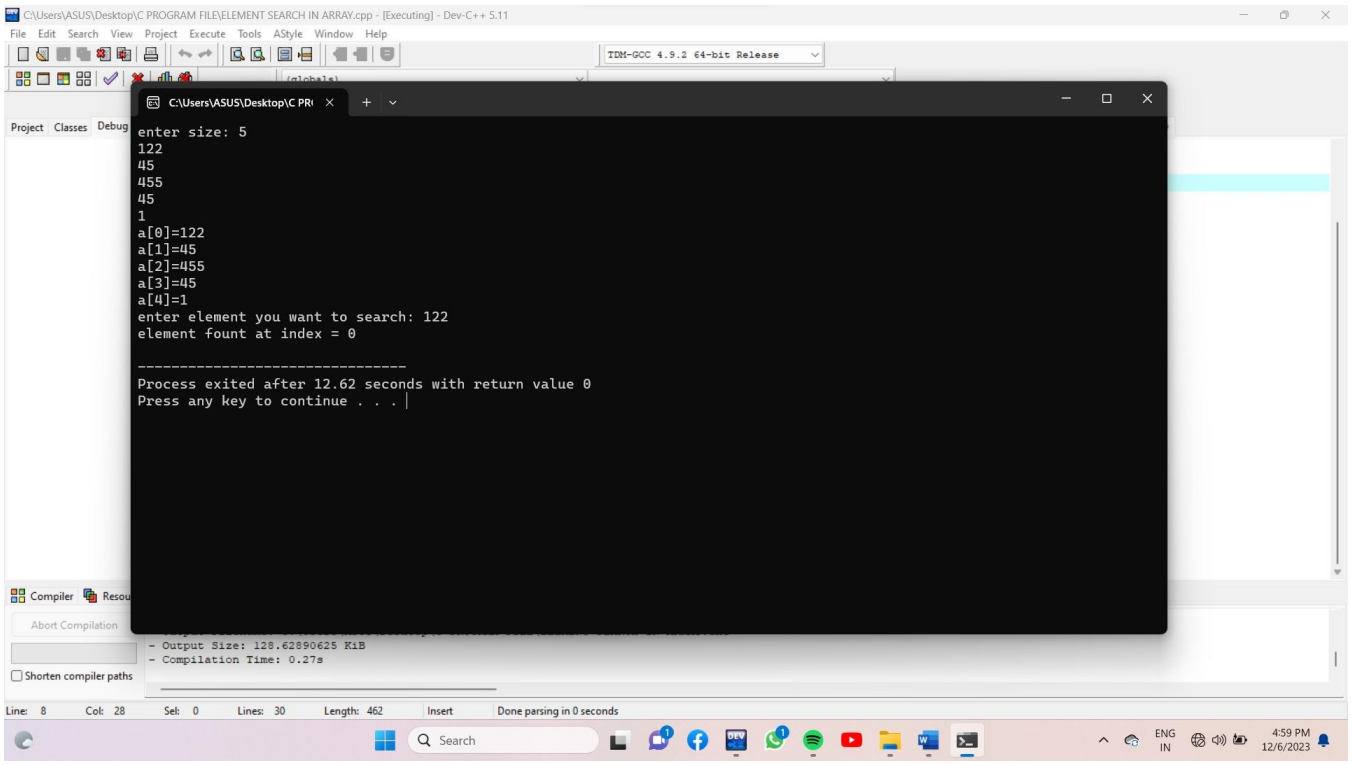
```
                for(int i=0;i<n;i++)
                {

                        printf("%d\t",a[i]);
                }

        return 0;
}
```



QUES: WAP TO SEARCH ELEMENT IN ARRAY?

#include<stdio.h>

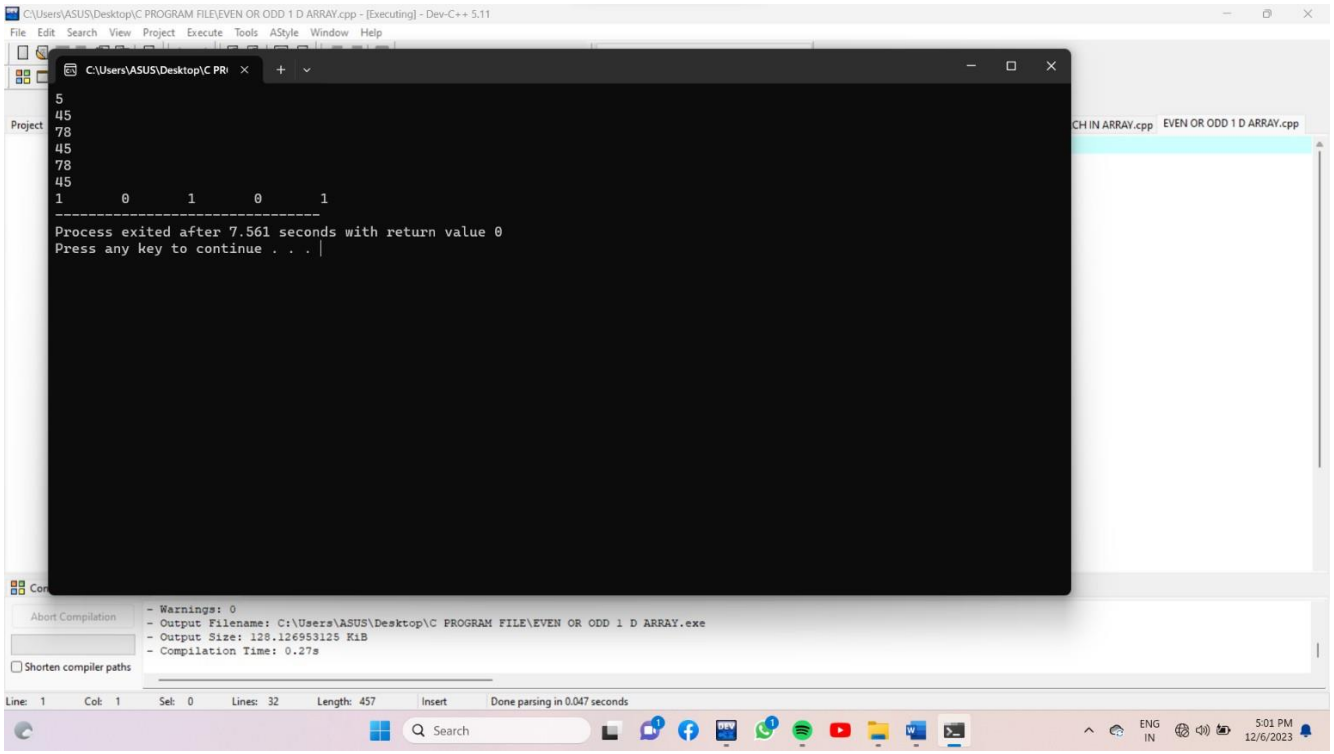
```
#include<conio.h>
int main()
{
	int  n;
	int a[n];
	int choice;
	printf("enter size: ");
	scanf("%d",&n);
	for(int i=0;i<n;i++)
	{
		scanf("%d",&a[i]);
	}
	for(int i=0;i<n;i++)
	{
		printf("a[%d]=%d\n",i,a[i]);
	}
	int flag;
	printf("enter element you want to search: ");
	scanf("%d",&flag);
	for(int i=0;i,n;i++)
	{
		if(a[i]==flag)
		{
			printf("element fount at index = %d\n",i);
			break;
		}
	}
	return 0;
}
```



QUES: WAP A PROGRAM TO FIND EVEN (1) OR ODD(0) IN ARRAY?

```
#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>


int main()

{

    int n,i;

    scanf("%d",&n);

    int a[n];

    for(i=0;i<n;i++)

    {

        scanf("%d",&a[i]);

    }


    for(i=0;i<n;i++)

    {

        if(a[i]%2==0)
```

```
        {
            a[i]=0;
        }
        else
        {
            a[i]=1;
        }
    }

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

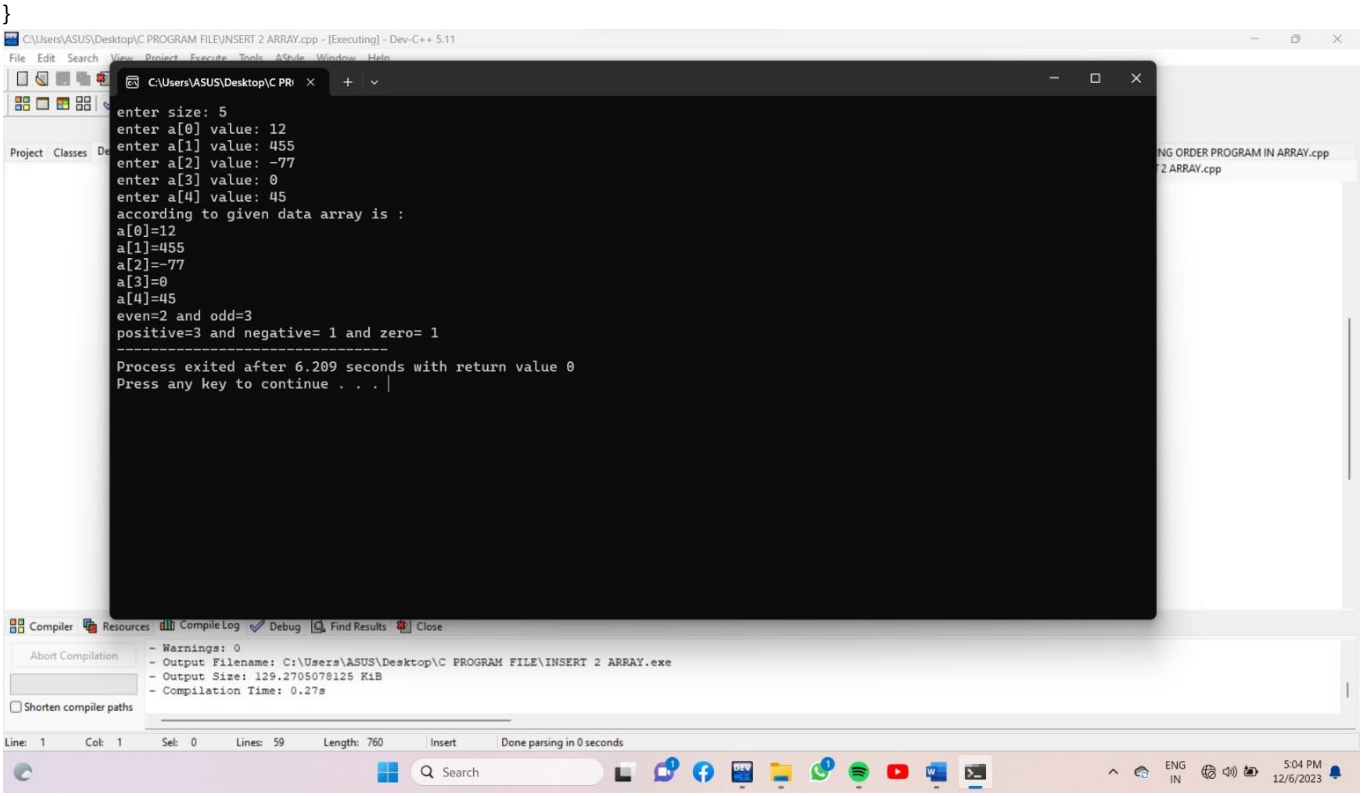


QUES: WAP TO FIND POSITIVE , NEGATIVE OR ZERO ELEMENT IN ARRAY?

```
#include<stdio.h>

#include<conio.h>

int main()

{

	int n;

	printf("enter size: ");

	scanf("%d",&n);

	int a[n];


	for(int i=0;i<n;i++)

	{

		printf("enter a[%d] value: ",i);

		scanf("%d",&a[i]);

	}

	printf("according to given data array is :  \n");


	for(int i=0;i<n;i++)

	{

		printf("a[%d]=%d\n",i,a[i]);

	}


	int odd=0;

	int even=0;


	for(int i=0;i<n;i++)

	{

		if(a[i]%2==0)

		{

			even++;

		}

		else

		{
```

```
                odd++;
        }
}

int  pos=0;
int  neg=0;
int zero=0;

for(int j=0;j<n;j++)
{
        if(a[j]>0)
        {
                pos++;
        }
        else if(a[j]<0)
        {
                neg++;
        }
        else
        {
                zero++;
        }
}
printf("even=%d and odd=%d\n",even,odd);
printf("positive=%d and negative= %d and zero= %d",pos,neg,zero);
```

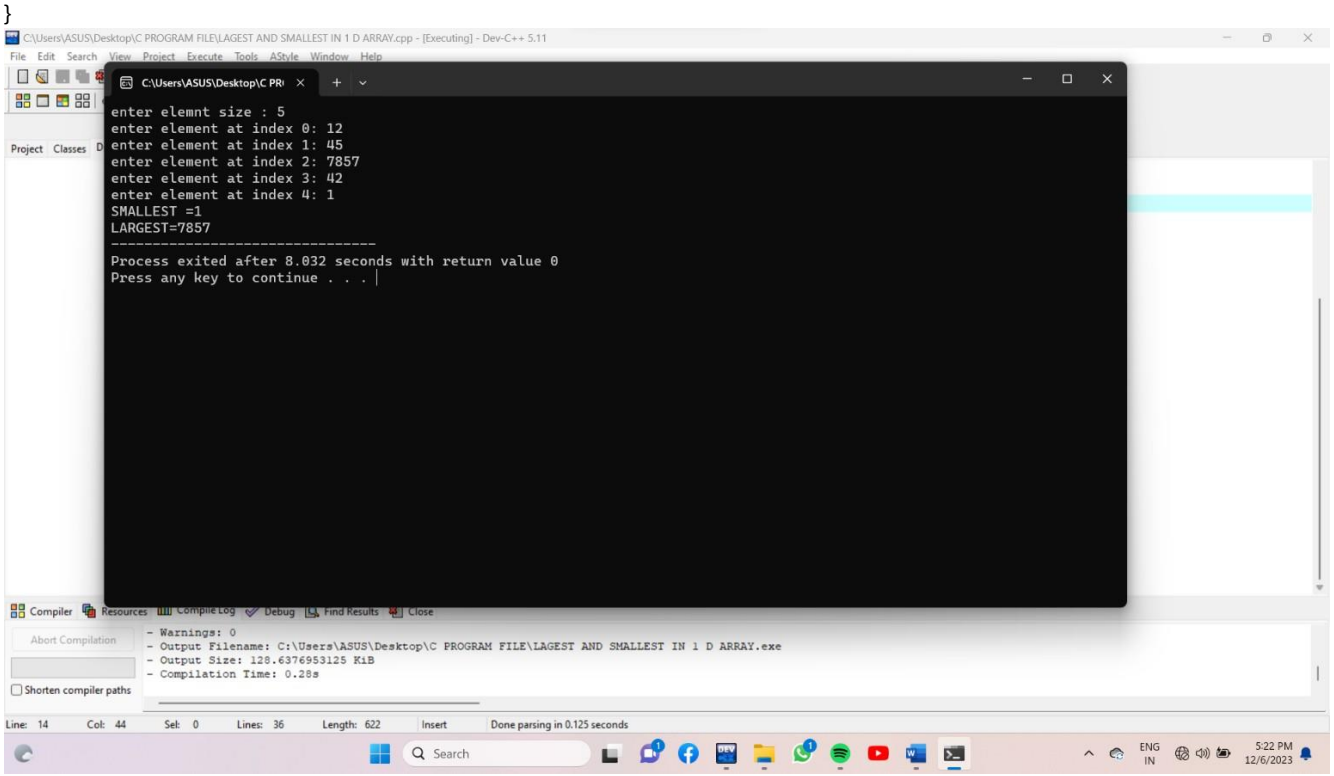
}



QUES: WAP TO FIND LARGEST AND SMALLEST IN ARRAY?

```
#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>


int main()

{

    int n,i;

    printf("enter elemnt size : ");

    scanf("%d",&n);

    int a[n];

    for(i=0;i<n;i++)

    {

            printf("enter element at index %d: ",i);

       scanf("%d",&a[i]);

    }
```

```
    int largest=a[0];
    int smallest=a[1];

    for(i=0;i<n;i++)
    {
        if(a[i]>largest)
        {
            largest=a[i];
        }

        if(smallest>a[i])
        {
            smallest=a[i];
        }
    }
    printf("SMALLEST =%d\nLARGEST=%d",smallest,largest);

}
```



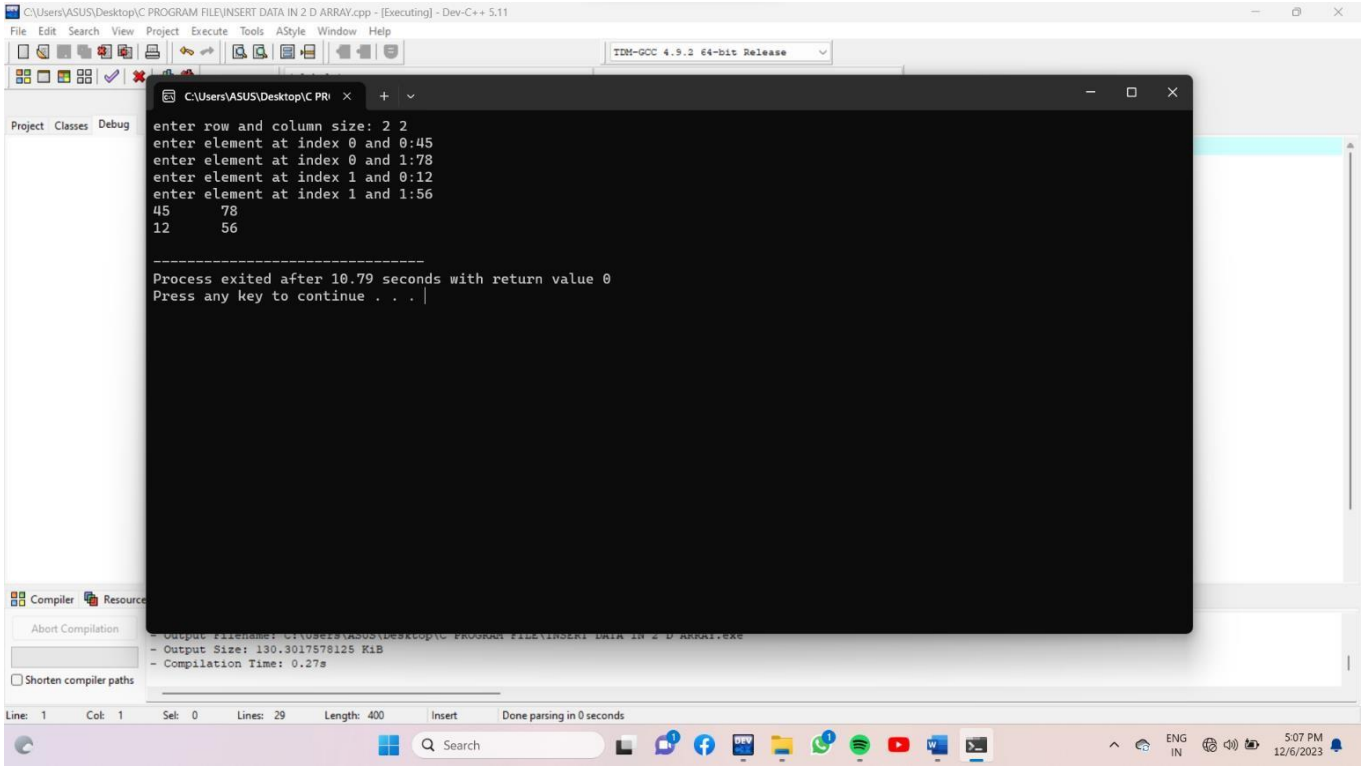
2 D ARRAY:

QUES: WAP TO INSERT ELEMENT IN 2 D ARRAY?

A#include<stdio.h>

```
int main()
{
        int m,n;
        printf("enter row and column size: ");
        scanf("%d %d",&m,&n);
        int a[m][n];

        for(int i=0;i<m;i++)
        {
                for(int j=0;j<n;j++)
                {
                        printf("enter element at index %d and %d:",i,j);
                        scanf("%d",&a[i][j]);
                }
        }

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

```
        }


}
```

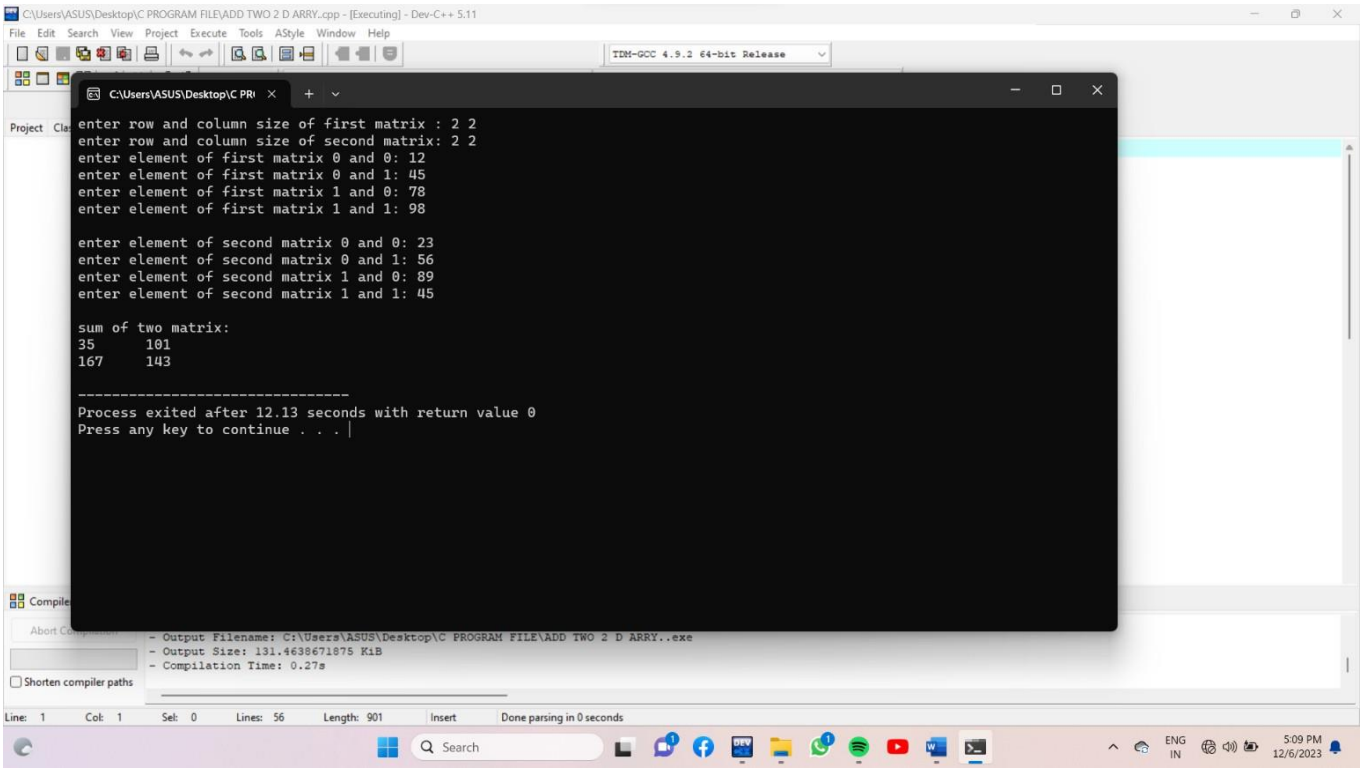


QUES: WAP TO ADD TWO 2 D MATRIX?

```
#include<stdio.h>

#include<conio.h>

int main()

{

        int m,n,p,q;

        printf("enter row and column size of first matrix : ");

        scanf("%d %d",&m,&n);

        printf("enter row and column size of second matrix: ");

        scanf("%d %d",&p,&q);

        int a[m][n];

        int b[m][n];

        int c[m][n];


        for(int i=0;i<m;i++)
```

```
{
        for(int j=0;j<n;j++)
        {
                printf("enter element of first matrix %d and %d: ",i,j);
    scanf("%d",&a[i][j]);
        }
}

printf("\n");

for(int i=0;i<m;i++)
{
        for(int j=0;j<n;j++)
        {
                printf("enter element of second matrix %d and %d: ",i,j);
    scanf("%d",&b[i][j]);
        }
}

int sum=0;

for (int i=0;i<m;i++)
{
        for(int j=0;j<n;j++)
        {
            c[i][j]=a[i][j]+b[i][j];
        }
}

 printf("\nsum of two matrix: \n");

for(int i=0;i<m;i++)
{
```

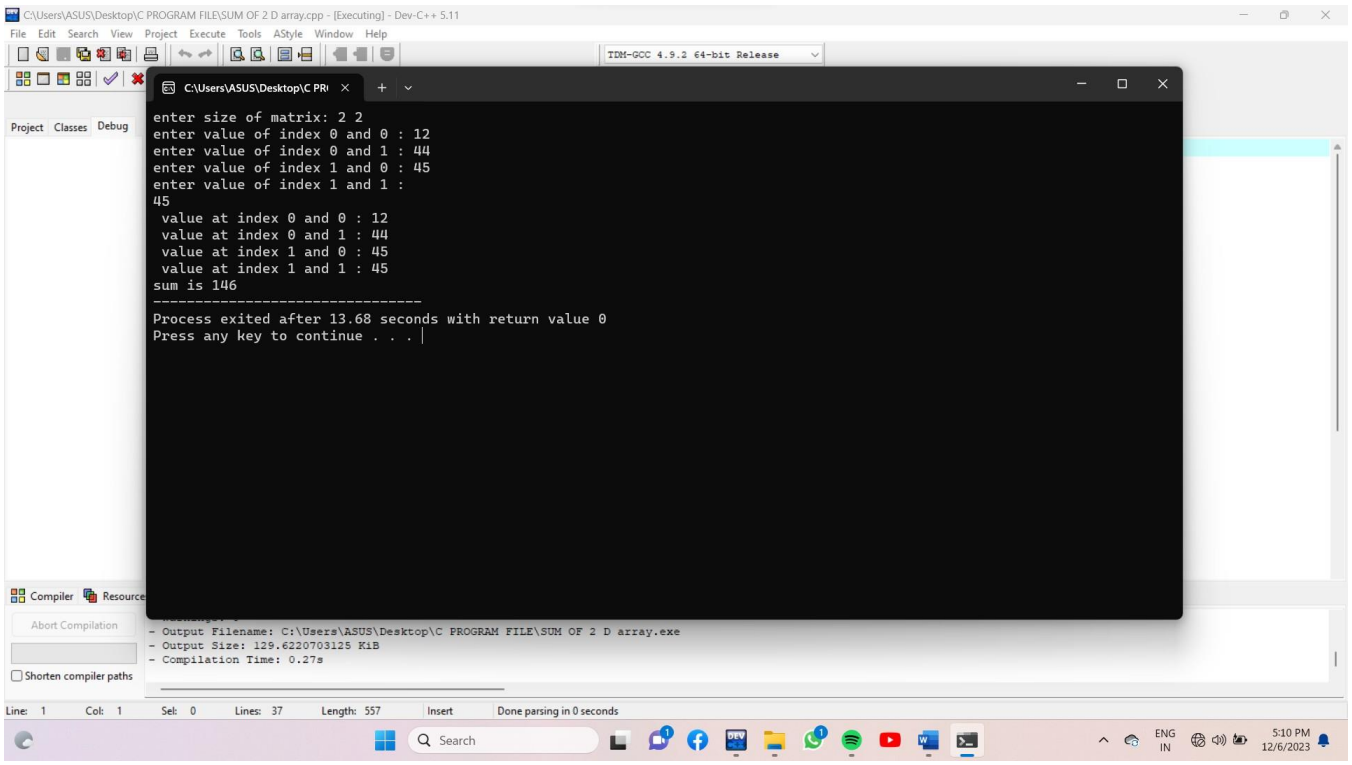
```
            for(int j=0;j<n;j++)
            {

                printf("%d\t",c[i][j]);
            }

            printf("\n");
        }
}
```



QUES: WAP TO SUM ELEMENT IN 2 D ARRAYOR MATRIX?

```
#include<stdio.h>

int main()

{

        int m,n;

        int sum=0;

        printf("enter size of matrix: ");

        scanf("%d %d",&m,&n);

        int a[m][n];

        for(int i=0;i<m;i++)
```

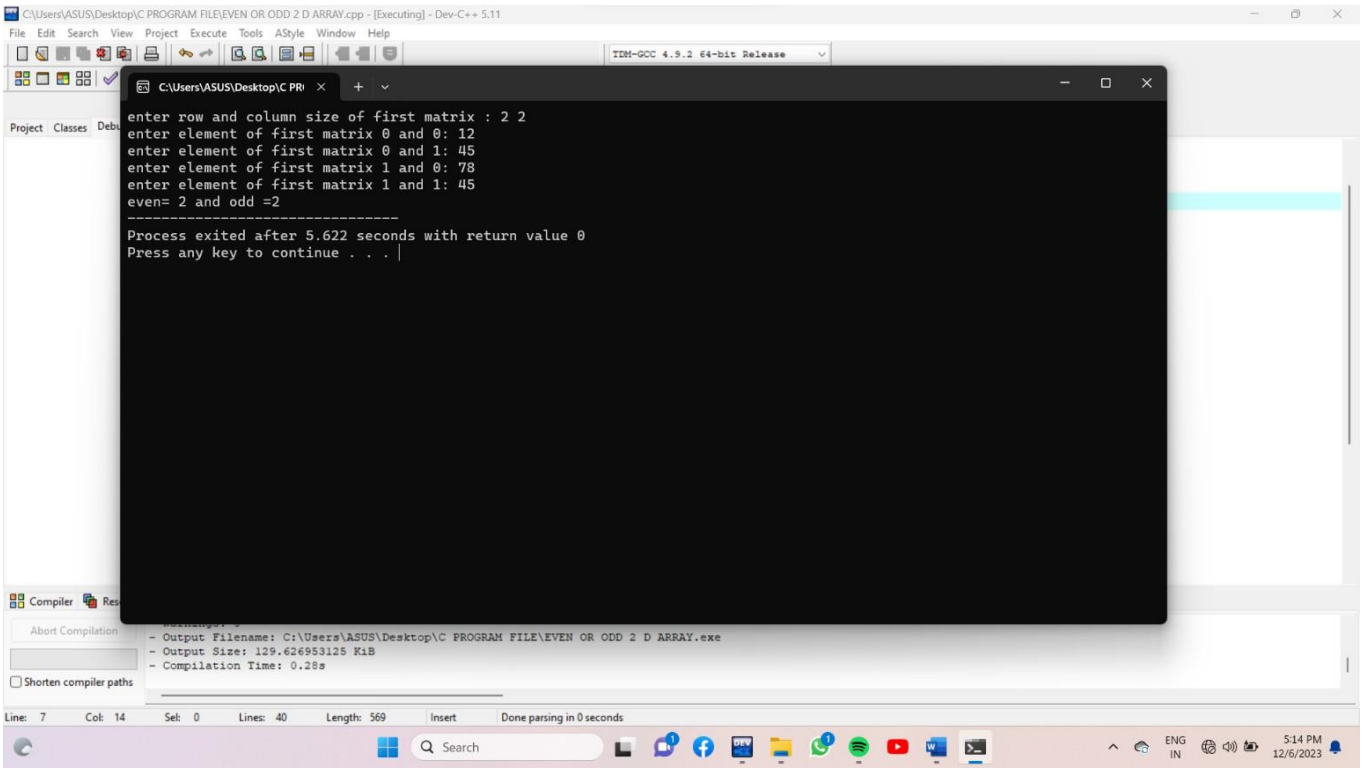
```
        {
                for(int j=0;j<n;j++)
                {
                        printf("enter value of index %d and %d : ",i,j);
                        scanf("%d",&a[i][j]);
                }
        }

        for(int i=0;i<m;i++)
                {
                        for(int j=0;j<n;j++)

                        {
                                printf(" value at index %d and %d : %d\n",i,j,a[i][j]);
                        }
                }

                for(int i=0;i<m;i++)
                {
                        for(int j=0;j<n;j++)

                        {
                                sum=sum+a[i][j];
                        }
                }
                printf("sum is %d",sum);
}
```



QUES: WAP TO FIND ODD OR EVEN INT WO D ARRAY?

```
#include<stdio.h>

#include<conio.h>

int main()

{

	int m,n;

	int even=0;

	int odd=0;

	printf("enter row and column size of first matrix : ");

	scanf("%d %d",&m,&n);

	int a[m][n];


	for(int i=0;i<m;i++)

	{

		for(int j=0;j<n;j++)

		{


			printf("enter element of first matrix %d and %d: ",i,j);

	scanf("%d",&a[i][j]);
```

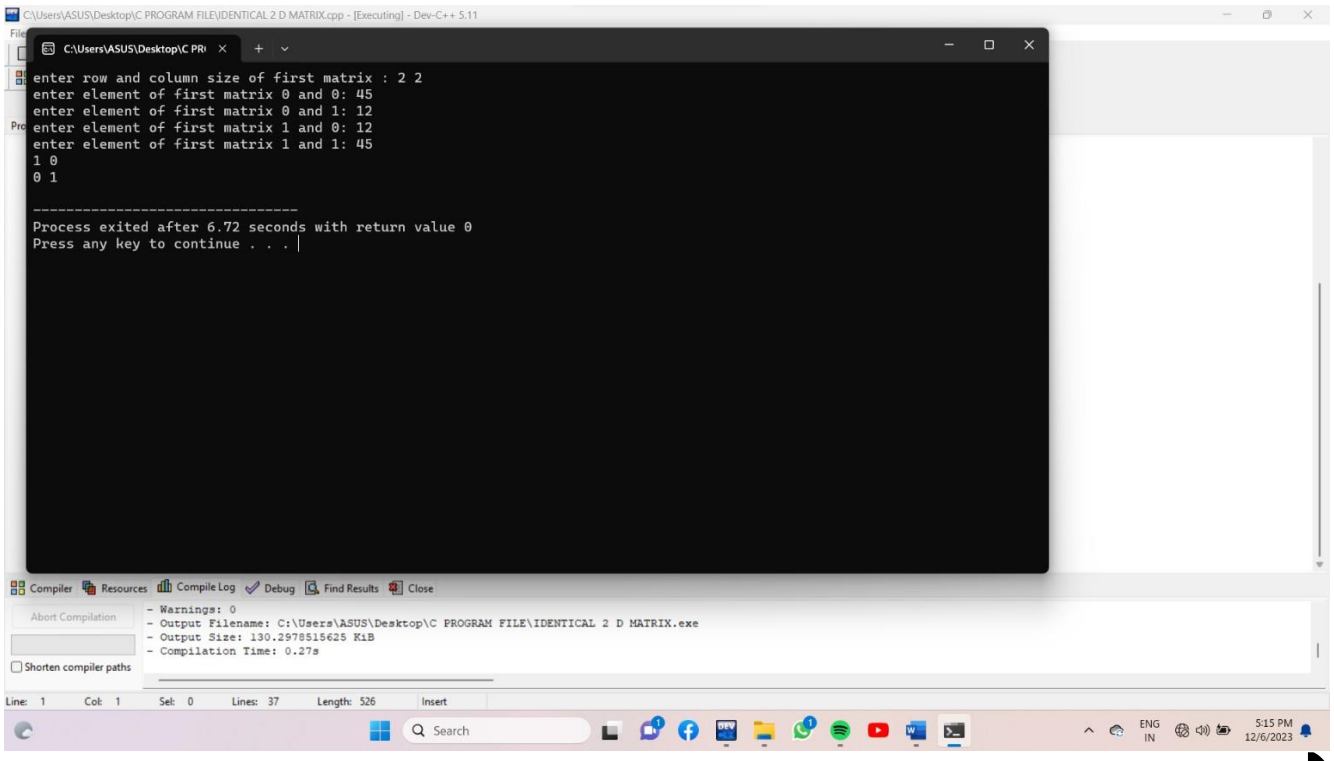
```
            }
        }

        for (int i=0;i<m;i++)
        {
            for(int j=0;j<n;j++)
            {
                if(a[i][j]%2==0)
                {
                  even ++;
                }
                else
                {
                  odd++;
                }
            }
        }

            printf("even= %d and odd =%d",even,odd);

        return 0;
}
```



QUES: WAP TO MAKE A 2 D MATRIX IN IDENTICAL MATRIX?

```
#include<stdio.h>

#include<conio.h>

int main()

{

        int m,n;

        printf("enter row and column size of first matrix : ");

        scanf("%d %d",&m,&n);

        int a[m][n];



        for(int i=0;i<m;i++)

        {

                for(int j=0;j<n;j++)

                {

                        printf("enter element of first matrix %d and %d: ",i,j);

      scanf("%d",&a[i][j]);

                }

        }
```

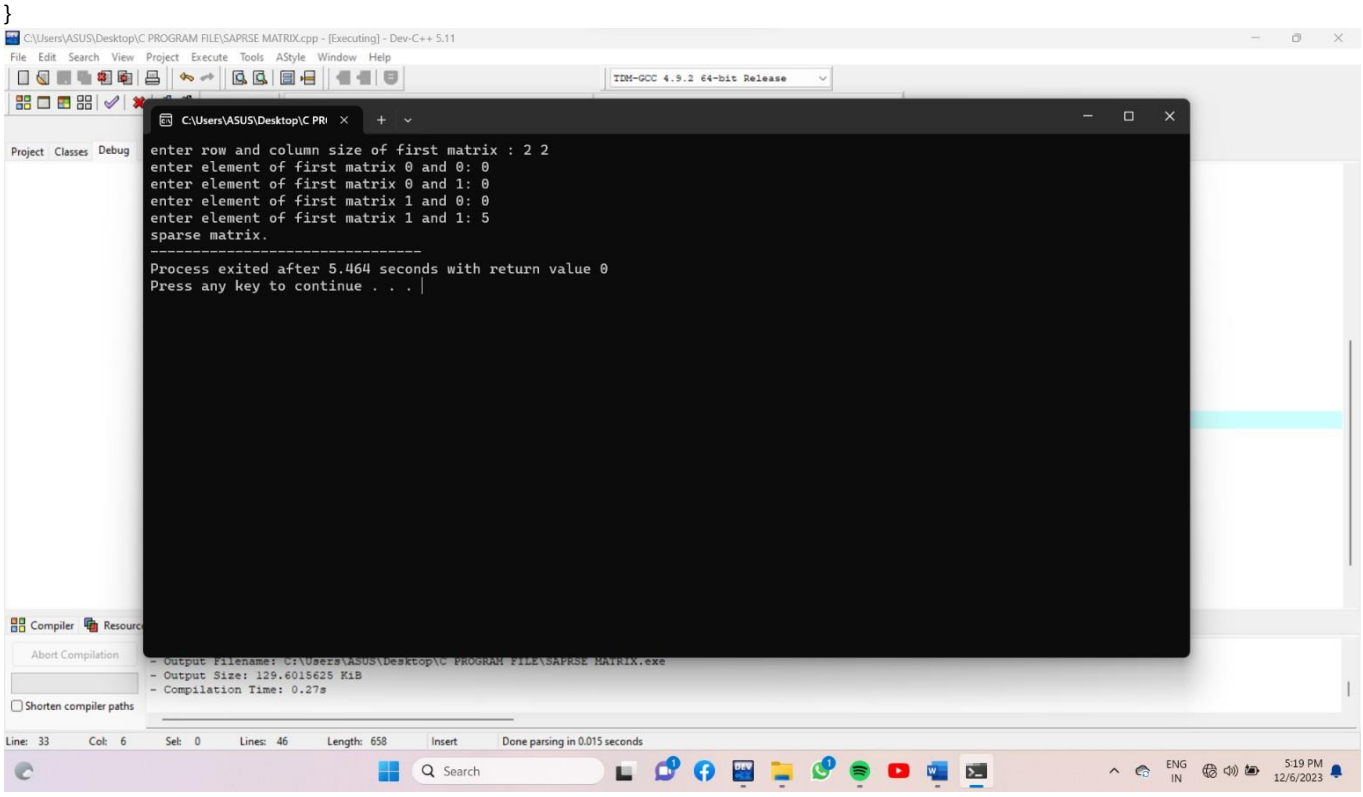
```
        for(int i=0;i<m;i++)
        {
                for(int j=0;j<n;j++)
                {
                        if(i==j)
                        {
                                printf("%d ",a[i][j]=1);
                        }
                        else
                        {
                                printf("%d ",a[i][j]=0);
                        }

                }
                printf("\n");
        }
}
```



QUES : WAP TO CHEAK WHEATHER MATRIX IS SPARXE OR NOT?

```
//WAP TO FIND MATRIX IS SPARSE OR NOT//
#include<stdio.h>
#include<conio.h>
int main()
{
	int m,n;
	int count;
	int half=(m*n)/2;
	printf("enter row and column size of first matrix : ");
	scanf("%d %d",&m,&n);
	int a[m][n];

	for(int i=0;i<m;i++)
	{
		for(int j=0;j<n;j++)
		{

			printf("enter element of first matrix %d and %d: ",i,j);
	scanf("%d",&a[i][j]);
		}
	}

	for (int i=0;i<m;i++)
	{
		for(int j=0;j<n;j++)
		{
			if(a[i][j]==0)
			{
			  count ++;
			}

		}
```

```
    }

    if(count>=half)
    {
        printf("sparse matrix.");
    }
    else
    {
        printf("matris is not sparse matrix.");
    }

    return 0;
}
```

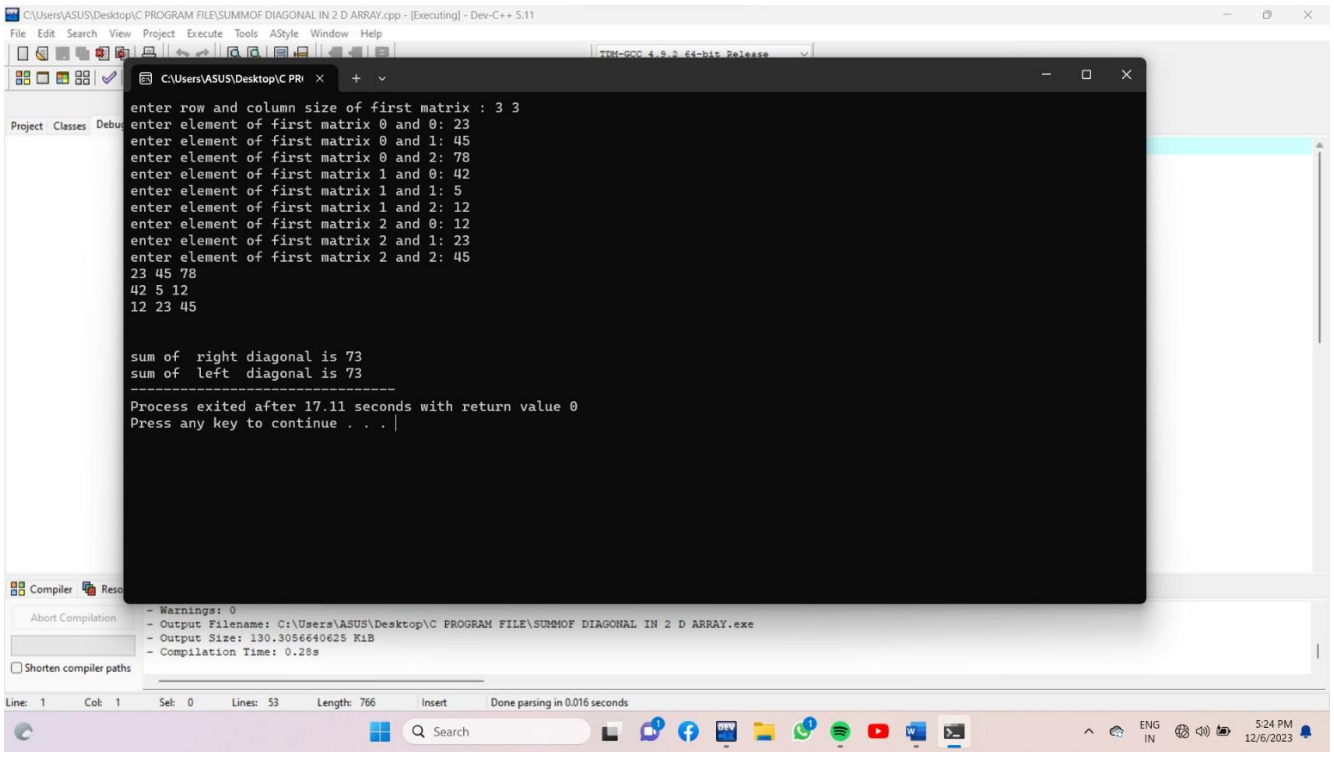


QUES: WAP TO SUM DIAGONAL IN 1 D ARRAY?

```
#include<stdio.h>

#include<conio.h>

int main()

{
```

```
int m,n;
int sum1=0;
int sum=0;
printf("enter row and column size of first matrix : ");
scanf("%d %d",&m,&n);
int a[m][n];


for(int i=0;i<m;i++)
{
        for(int j=0;j<n;j++)
        {

                printf("enter element of first matrix %d and %d: ",i,j);
    scanf("%d",&a[i][j]);
        }
}




for (int i=0;i<m;i++)
{
        for(int j=0;j<n;j++)
        {
                if(i==j)
                {
                  sum=sum+a[i][j];
                }
                printf("%d ",a[i][j]);

        }
        printf("\n");
}
printf("\n");
```

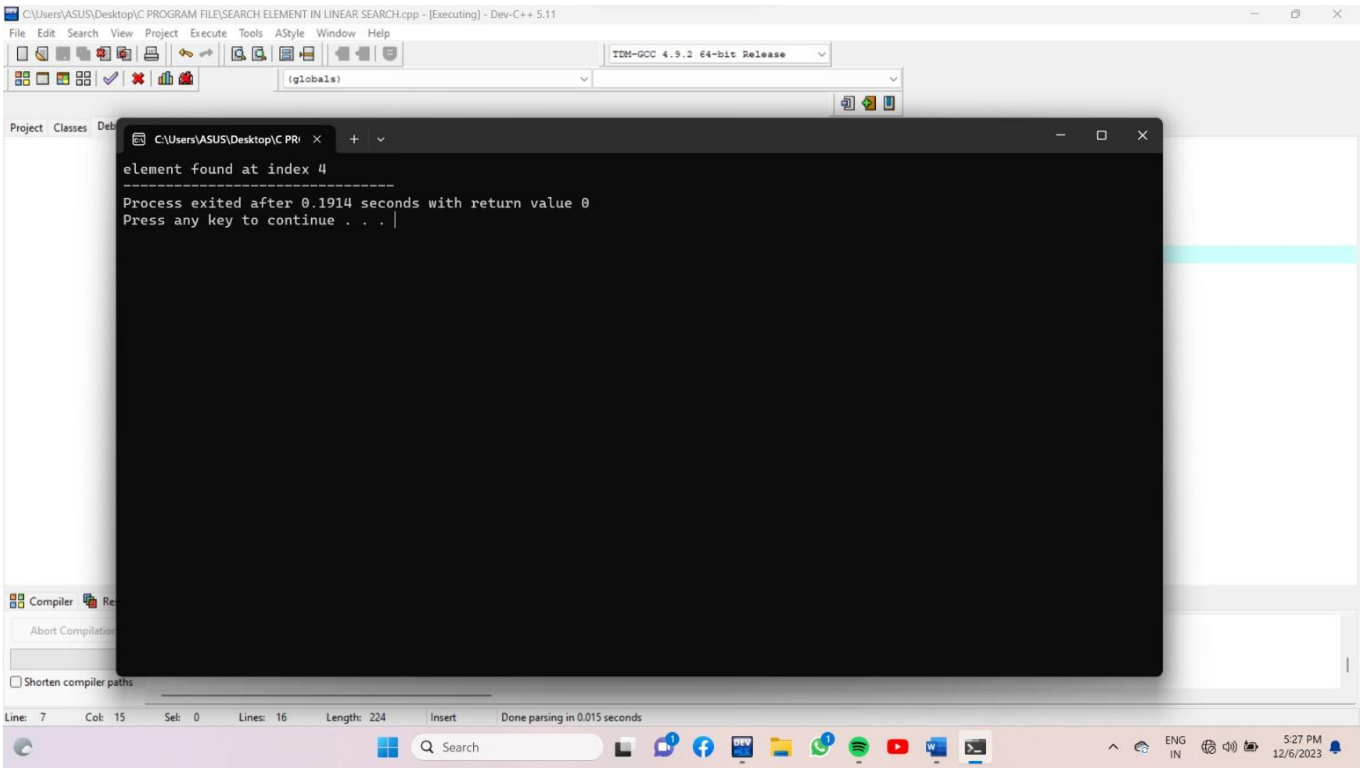
```
        for(int i=0;i<m;i++)
        {
                for(int j=n-1;j>=0;j--)
                if(i==j)
                {

                        {
                                sum1=sum1+a[i][j];
                        }
                }
        }

        printf("\nsum of right diagonal is %d",sum);
        printf("\nsum of  left  diagonal is %d",sum1);
}
```



LINEAR SERCH:

QUES :WAP TO SEARCH ELEMENT IN LINEAR SEARCH?

```
#include<stdio.h>

#include<conio.h>

int main()

{

        int n=5;

        int a[5]={10,20,30,40,50};

        int  item=50;

        for(int i=0;i<n;i++)

        {

                if(a[i]==item)

                {

                        printf("element found at index %d",i);

                        break;

                }

        }

}
```

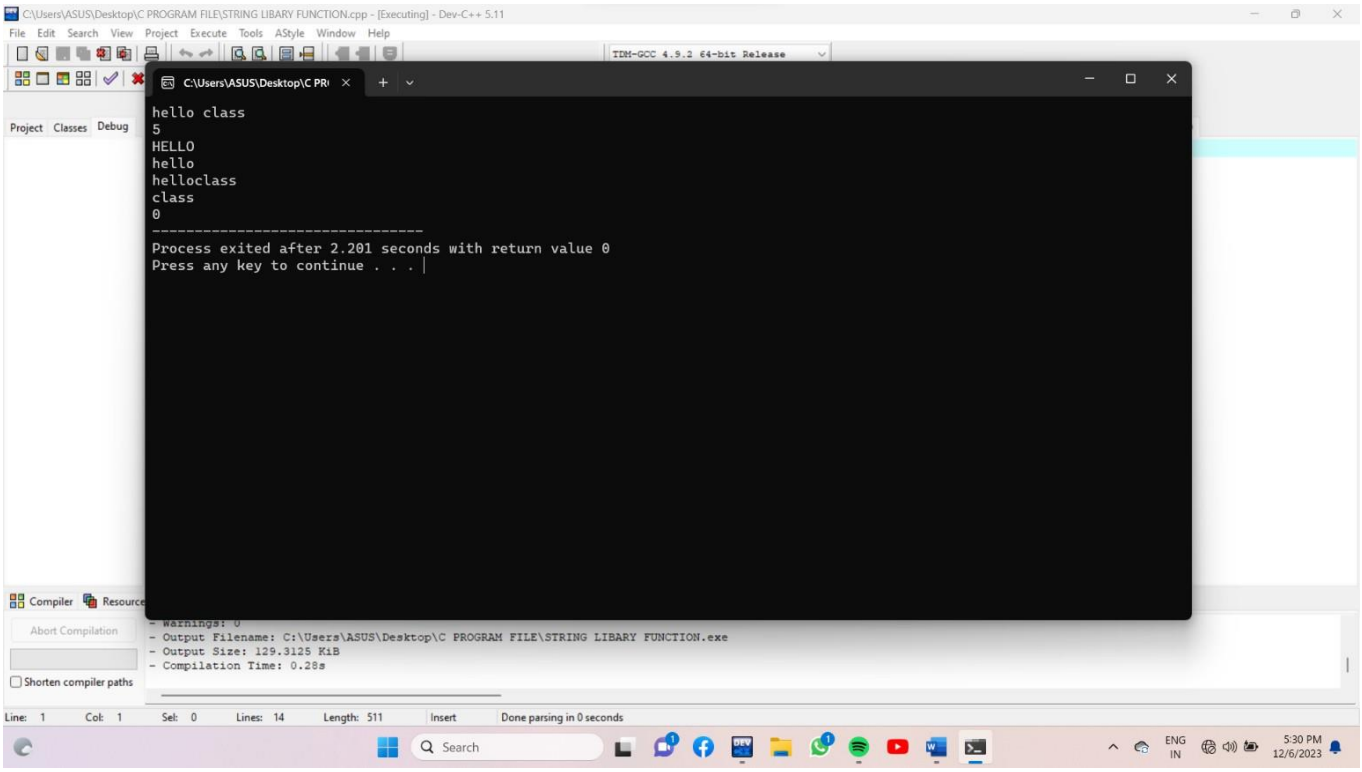


STRING :

QUES : WAP TO USE ALL FUNCTION IN STRING?

```
#include<stdio.h>

#include<string.h>

int main()

{

        char s[5]={'h','e','l','l','o'};

        char t[]={"class"};

        printf("%s %s",s,t);

        printf("\n%d",strlen(t)); // to cheak lentgh//

        printf("\n%s",strupr(s)); // to convert in upper//

        printf("\n%s",strlwr(s)); // to convert in lower//

        printf("\n%s",strcat(s,t));  // to combine 2 string//

        printf("\n%s",strcpy(s,t));  // to copy one string and paste it into another string//
```

```
    printf("\n%d",strcmp(s,t));  // to compere which one is greater //
}
```

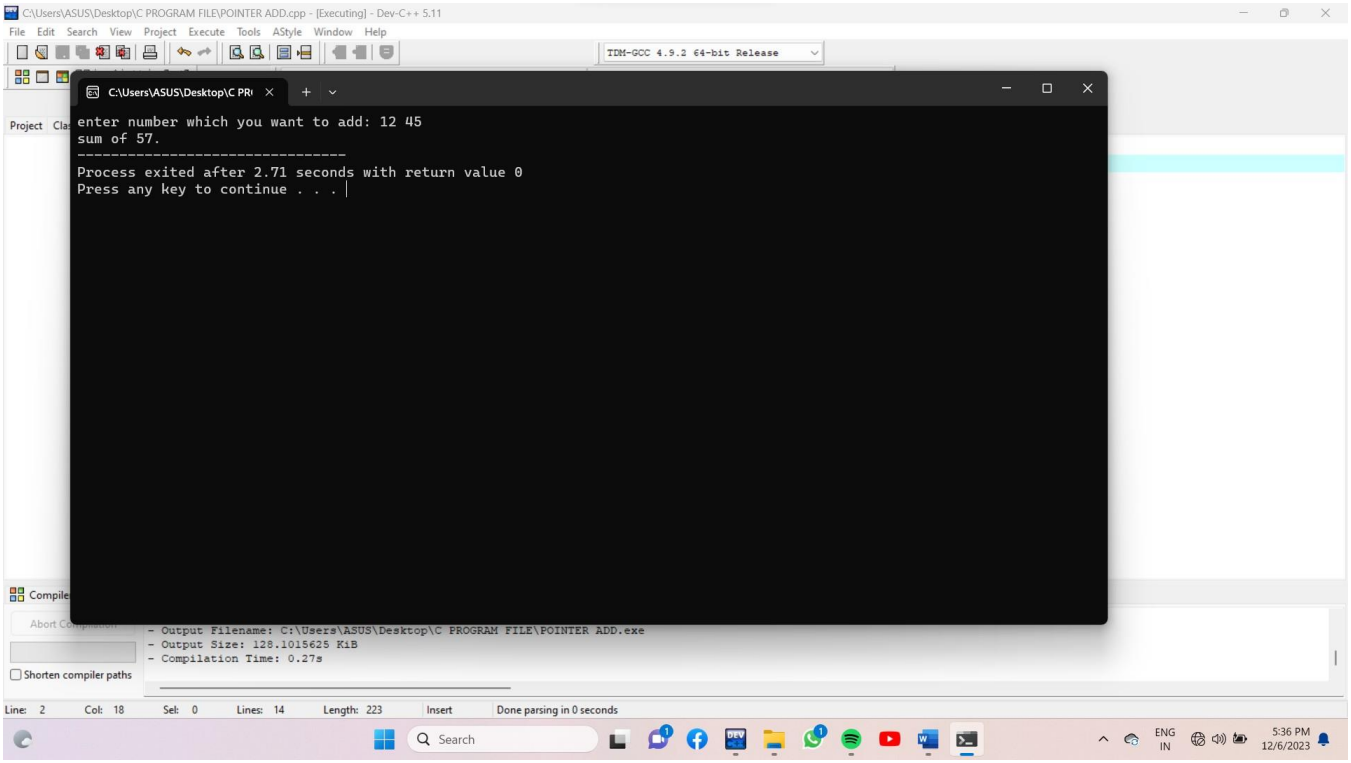


POINTER :

QUES: WAP TO ADD TWO NUMBER USING POINTER ?

```
#include<stdio.h>

#include<conio.h>


        int main()

        {

                int a,b;

                printf("enter number which you want to add: ");

                scanf("%d %d",&a,&b);

                int *p=&a;

                int *q=&b;

                int c=*p+*q;
```

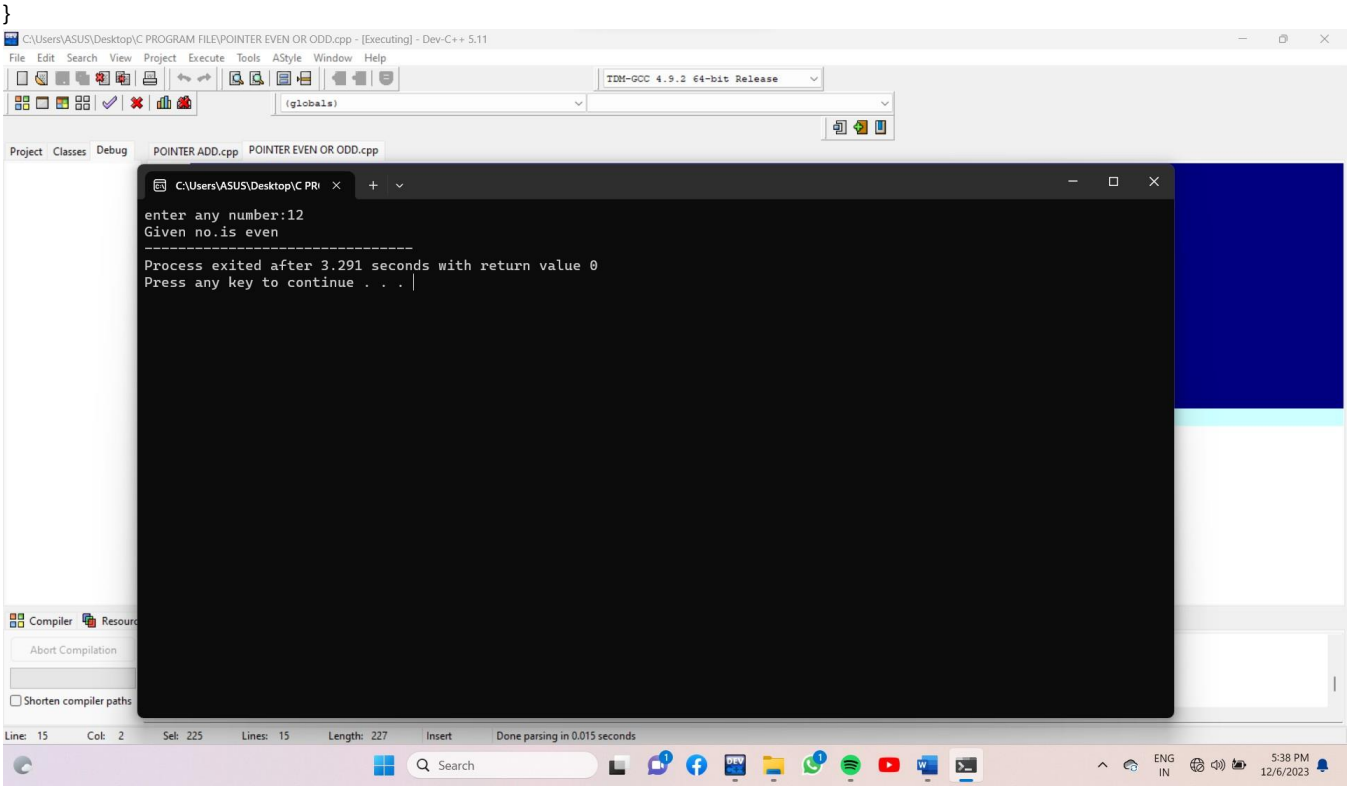
```
        printf("sum of %d. ",c);
    }
```



QUES : WAP TO FIND NUMBER IS EVEN OR ODD USING POINTER ?

```
#include<stdio.h>

#include<conio.h>

int main()

{

        int a;

        printf("enter any number:");

        scanf("%d",&a);

        int *p=&a;

        if(*p%2==0){

        printf("Given no.is even");}

        else{

        printf("Given no. is odd");

        }

        return 0;
```

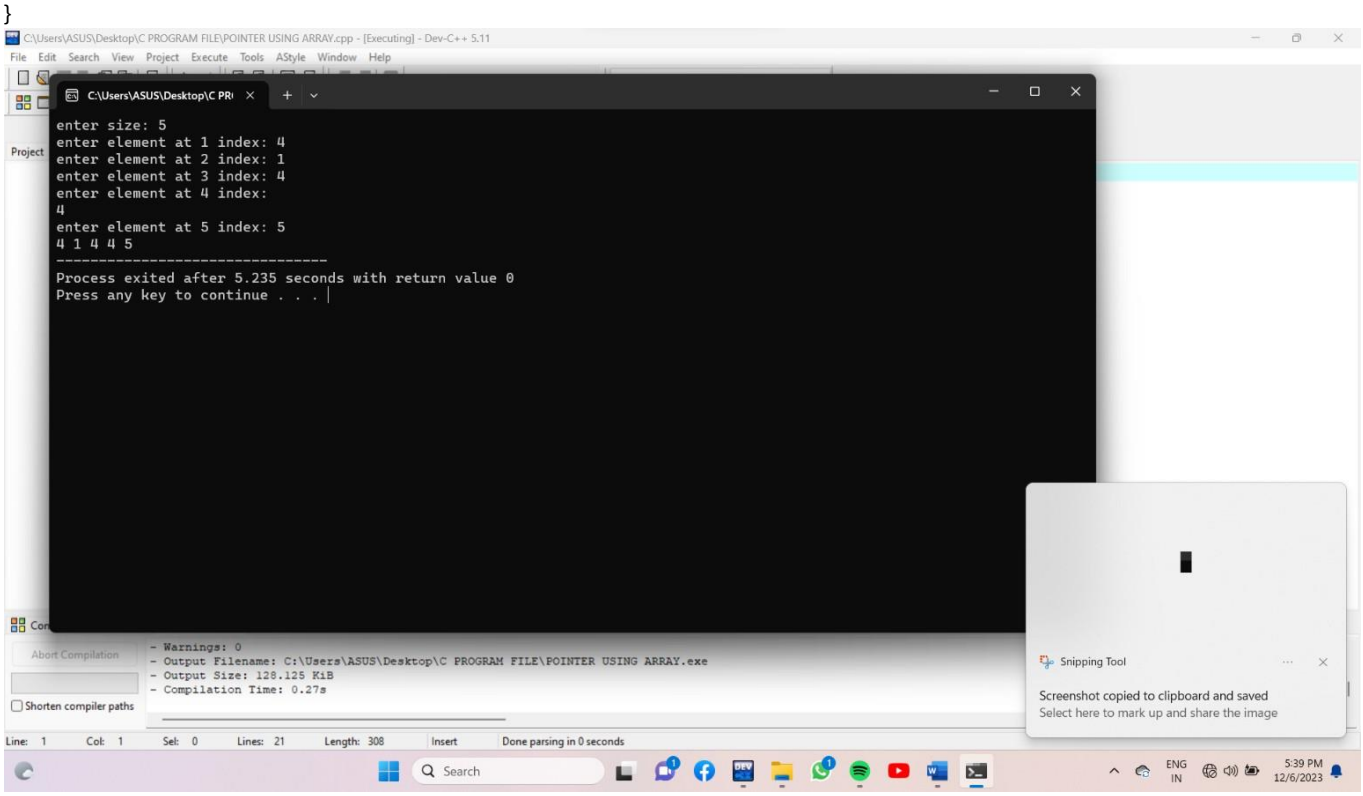
}



QUES : WAP TO ENTER ELEMENT OF ARRAY IN POINTER?

```
#include<stdio.h>

#include<conio.h>

int main()

{

        int  n;

        int a[n];

        printf("enter size: ");

        scanf("%d",&n);

        for(int i=0;i<n;i++)

        {

                printf("enter element at %d index: ",i+1);

                scanf("%d",&a[i]);

        }

        int *p=&a[0];

        for(int i=0;i<n;i++)

        {

                printf("%d ",*p);
```

```
            p++;
        }
        return 0;
}
```



PROJECT OR ASSINGMENT OF SEMESTER 1

1. WRITE A PROGRAM OF VOTING MACHINE?

```
#include<stdio.h>

#include<conio.h>

int win_by_vote;

int BJP=0;int BSP=0;int INC=0;int ADP=0; int others=0;

void vote();

void result();

void details();

void vote()

{
            int VOTE;
            printf("\npress 1 for vote for BJP\n");
```

```
printf("press 2 for vote for ADP\n");
printf("press 3 for vote for BSP\n");
printf("press 4 for vote for INC\n");
printf("press 5 for vote for OTHERS\n");
scanf("%d",&VOTE);
printf("\n");
switch(VOTE)
{
        case 1:
                {
                BJP+=1;
                break;
                }
        case 2:
                {
                ADP+=1;
                break;
                }
        case 3:
                {
                BSP+=1;
                break;
        }
        case 4:
                {
                INC+=1;
                break;
                }
        case 5:
                {
                others+=1;
                break;
                }
```

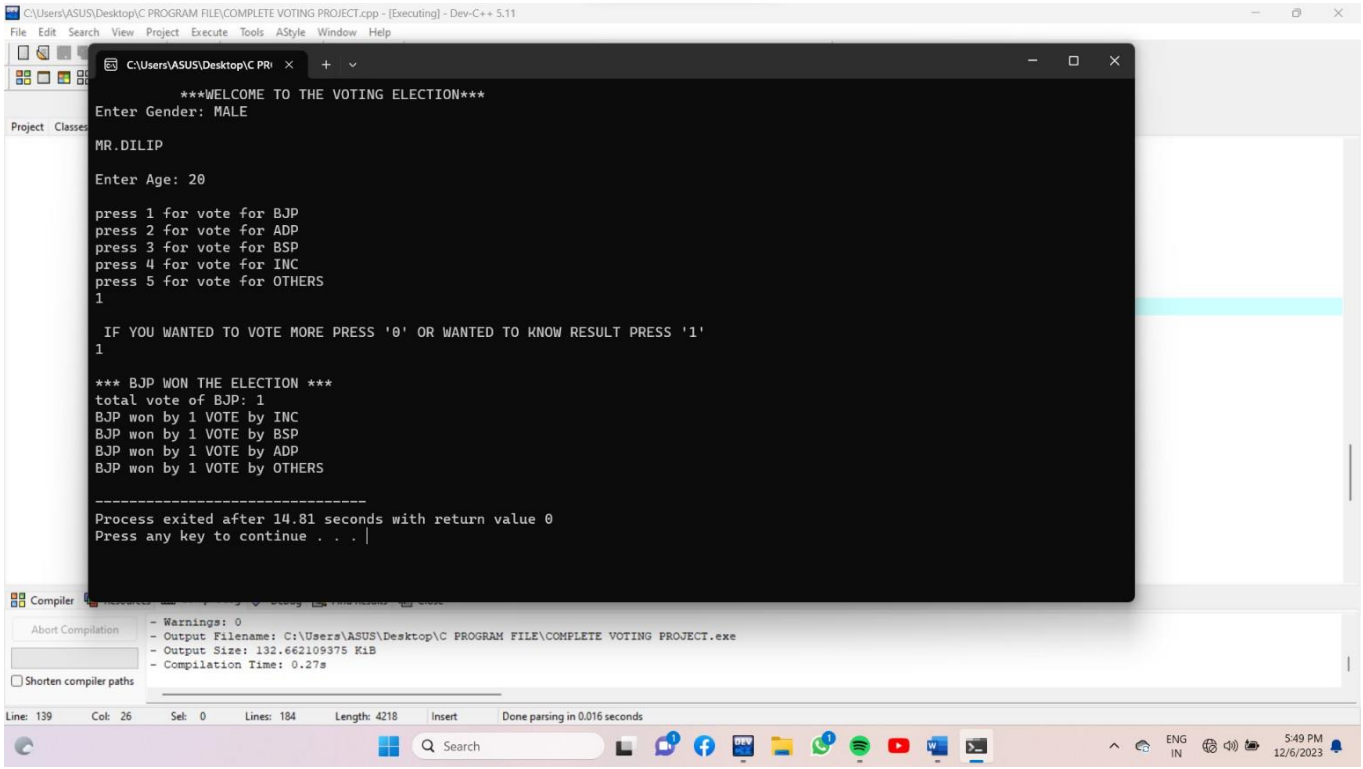
```
default:
        {
                printf("invalid\n");
        }
          }
        }
void result()
{

if(BJP>INC&&BJP>ADP&&BJP>BSP)
{

        printf("*** BJP WON THE ELECTION ***\n");
        printf("total vote of BJP: %d\n",BJP);
        win_by_vote=BJP-INC;
        printf("BJP won by %d VOTE by INC\n",win_by_vote);
        win_by_vote=BJP-BSP;
        printf("BJP won by %d VOTE by BSP\n",win_by_vote);
        win_by_vote=BJP-ADP;
        printf("BJP won by %d VOTE by ADP\n",win_by_vote);
        win_by_vote=BJP-others;
        printf("BJP won by %d VOTE by OTHERS\n",win_by_vote);
}
else if(INC>BSP&&INC>ADP&&INC>others)
{

        printf("*** INC WON THE ELECTION ***\n");
        printf("total vote of BJP : %d\n",BJP);
        win_by_vote=INC-BJP;
        printf("INC won by %d VOTE by BJP\n",win_by_vote);
        win_by_vote=INC-BSP;
        printf("INC won by %d VOTE by BSP\n",win_by_vote);
        win_by_vote=INC-ADP;
```

```
            printf("INC won by %d VOTE by ADP\n",win_by_vote);
            win_by_vote=INC-others;
            printf("INC won by %d VOTE by OTHERS\n",win_by_vote);
    }
    else if(BSP>ADP&&BSP>others)
    {

            printf("*** BSP WON THE ELECTION ***\n");
            printf("total vote of BSP : %d\n",BSP);
            win_by_vote=BSP-BJP;
            printf("BSP won by %d VOTE by BJP\n",win_by_vote);
            win_by_vote=BSP-INC;
            printf("BSP won by %d VOTE by INC\n",win_by_vote);
            win_by_vote=BSP-ADP;
            printf("BSP won by %d VOTE by ADP\n",win_by_vote);
            win_by_vote=BSP-others;
            printf("BSP won by %d VOTE by OTHERS\n",win_by_vote);
    }
    else if(ADP>others)
    {

            printf("*** ADP WON THE ELECTION ***\n");
            printf("total vote of ADP : %d\n",ADP);
            win_by_vote=ADP-BJP;
            printf("ADP won by %d VOTE by BJP\n",win_by_vote);
            win_by_vote=ADP-INC;
            printf("ADP won by %d VOTE by INC\n",win_by_vote);
            win_by_vote=ADP-BSP;
            printf("ADP won by %d VOTE by BSP\n",win_by_vote);
            win_by_vote=ADP-others;
            printf("ADP won by %d VOTE by OTHERS\n",win_by_vote);
    }
    else  if(BJP==INC&&BJP==ADP&&BJP==BSP&&BJP&&BJP==others)
```

```
                {
                        printf("***NO PARTY WON THE ELECTION ***");
                }
                else
                {


                        printf("*** OTHERS WON THE ELECTION ***\n");
                        printf("total vote of OTHERS: %d\n",others);
                        win_by_vote=others-BJP;
                        printf("OTHERS won by %d VOTE by BJP\n",win_by_vote);
                        win_by_vote=others-INC;
                        printf("OTHERS won by %d VOTE by INC\n",win_by_vote);
                        win_by_vote=others-BSP;
                        printf("OTHERS won by %d VOTE by BSP\n",win_by_vote);
                        win_by_vote=others-ADP;
                        printf("OTHERS won by %d VOTE by ADP\n",win_by_vote);
                }
        }


void details()
{
        int i,age;
        int n=6;
        char gender[10];
        printf("Enter Gender: ");
        scanf("%s",&gender);
        if(gender[0]=='m'||gender[0]=='M')
        {
                printf("\nMr.");
                char name[50];
                scanf("%s",&name);
        }
```

```
        else if(gender[0]=='f'||gender[0]=='F')
        {
                printf("\nMiss.");
                char name[50];
                scanf("%s",&name);
        }
        else
        {
                printf("\nInvalid");
        }
        printf("\nEnter Age: ");
        scanf("%d",&age);
}

int main()
{
        int n=1;
        printf("        ***WELCOME TO THE VOTING ELECTION***\n");
        details();
        vote();
        while(n<11)
        {
                int choice;
                printf(" IF YOU WANTED TO VOTE MORE PRESS '0'");
                printf(" OR WANTED TO KNOW RESULT PRESS '1'\n");
                scanf("%d",&choice);
                printf("\n");
                if(choice==1)
                {
                        result();
                        break;
                }
                else
```

```
                {
                        details();
                        vote();
                }
                n++;
        }
                return 0;
}
```



THANKS !!!