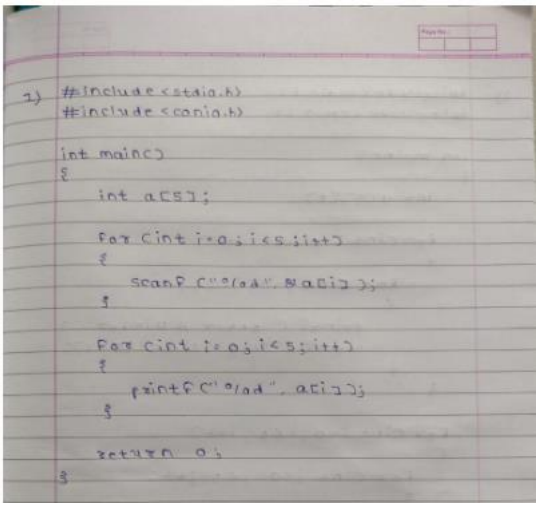
Marwadi University
Faculty of Technology
Department of Information and Communication Technology

Experiment: 1

Aim: Accept 5 numbers in an array and display it.

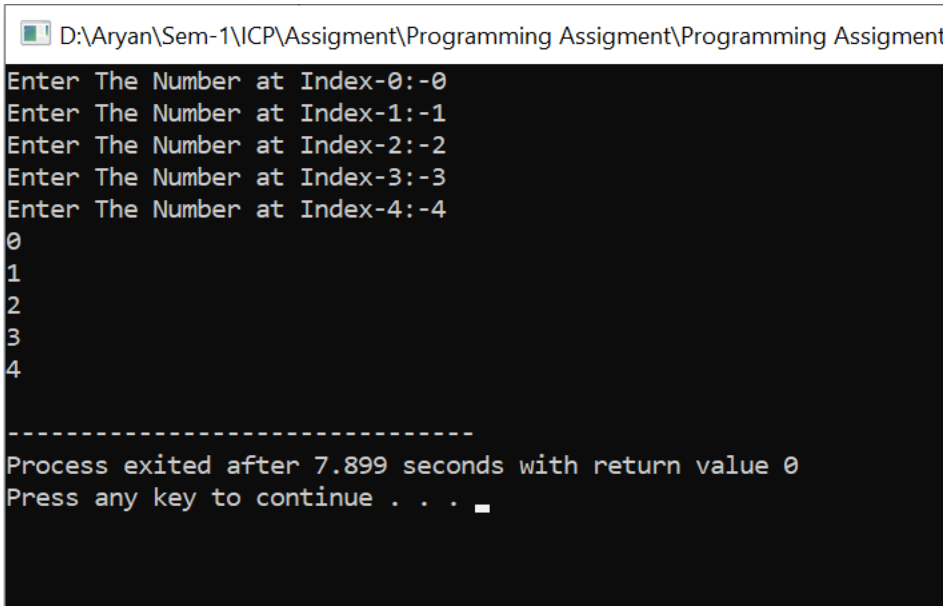
Software: Dev C++

Code:



```
1) #include <stdio.h>
   #include <conio.h>

   int main()
   {
      int a[5];

      for(int i=0;i<5;i++)
      {
         scanf("%d",&a[i]);
      }

      for(int i=0;i<5;i++)
      {
         printf("%d",a[i]);
      }

      return 0;
   }
```

Output:



```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming Assigment
Enter The Number at Index-0:-0
Enter The Number at Index-1:-1
Enter The Number at Index-2:-2
Enter The Number at Index-3:-3
Enter The Number at Index-4:-4
0
1
2
3
4

--------------------------------
Process exited after 7.899 seconds with return value 0
Press any key to continue . . .
```

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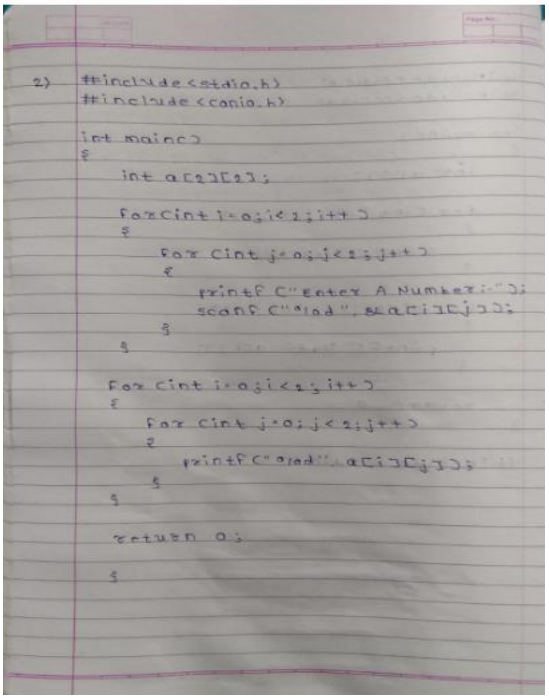
Experiment: 2

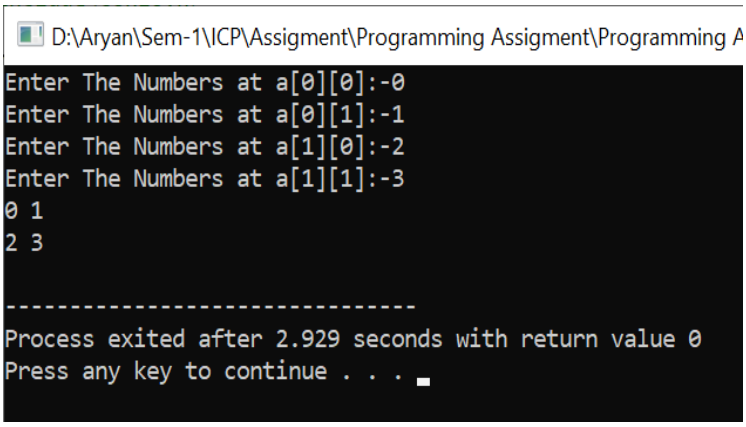
Aim: Accept 4 numbers in 2-d array.

Software: Dev C++

Code:



Output:



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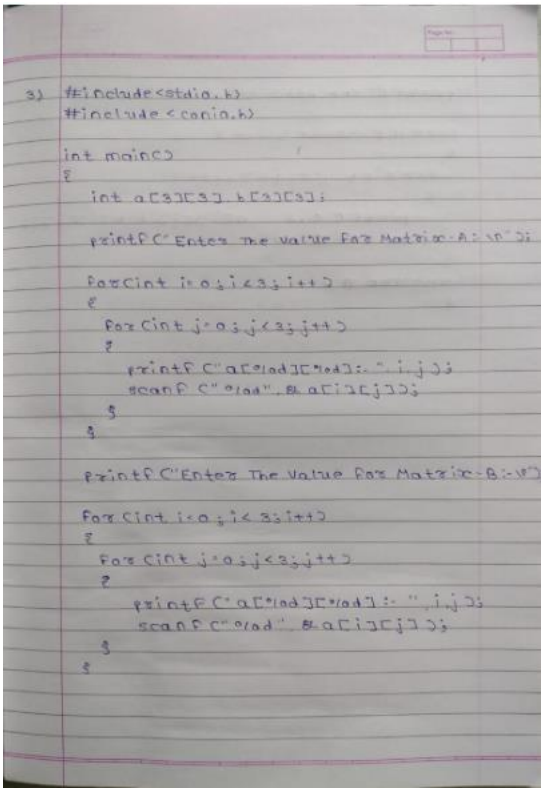
Experiment: 3

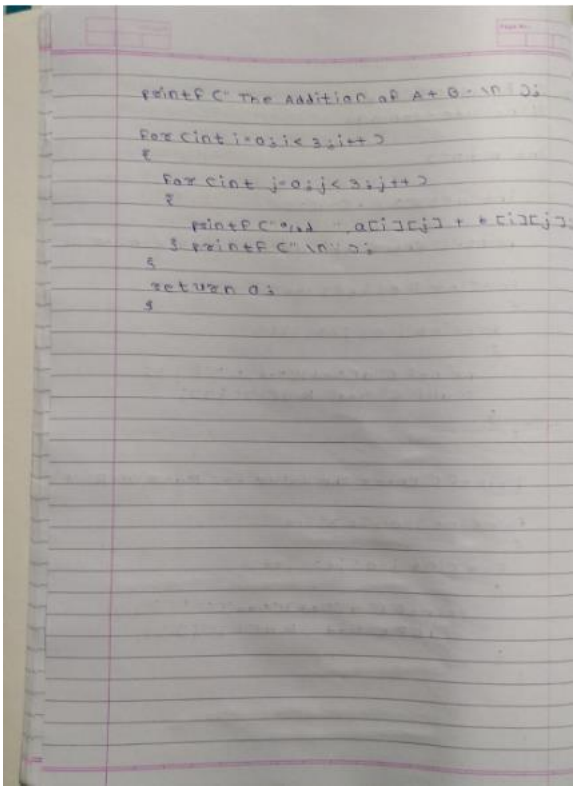
Aim: Write a program to add two matrices.

Software: Dev C++

Code:-



```
3) #include<stdio.h>
#include<conio.h>

int main()
{
  int a[3][3], b[3][3];

  printf("Enter the value for Matrix-A:\n");

  for(int i=0;i<3;i++)
  {
    for(int j=0;j<3;j++)
    {
      printf("a[%d][%d]:- ",i,j);
      scanf("%d",&a[i][j]);
    }
  }

  printf("Enter The Value for Matrix-B:\n")

  for(int i=0;i<3;i++)
  {
    for(int j=0;j<3;j++)
    {
      printf("a[%d][%d]:- ",i,j);
      scanf("%d",&a[i][j]);
    }
  }
```



```
  printf("The Addition of A+B:\n");

  for(int i=0;i<3;i++)
  {
    for(int j=0;j<3;j++)
    {
      printf("%d ",a[i][j]+b[i][j]);
    }
    printf("\n");
  }
  return 0;
}
```

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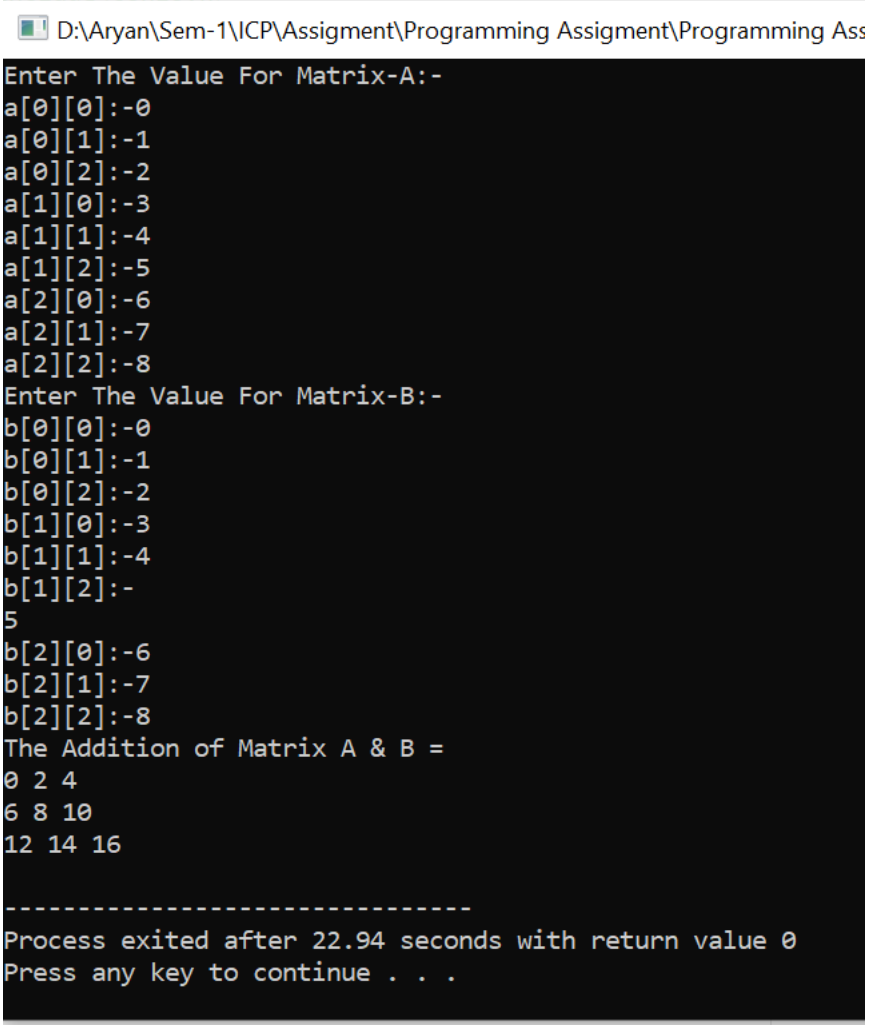
Output:



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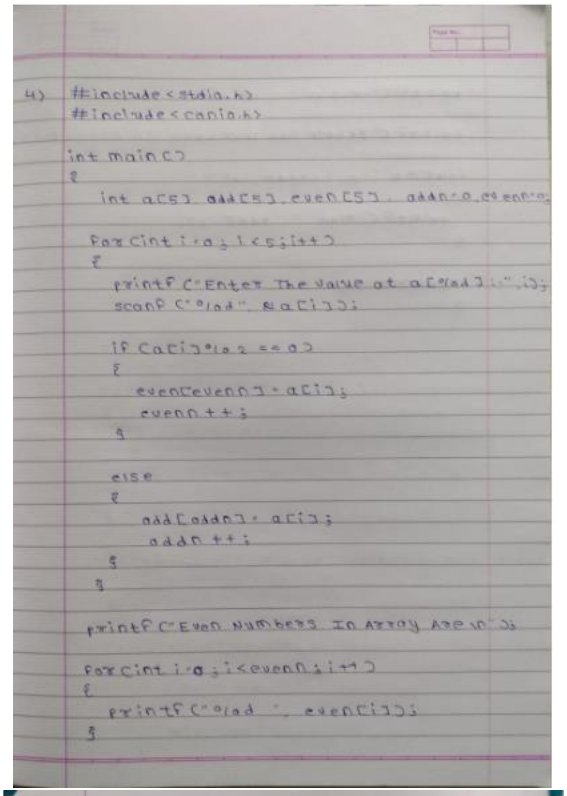
Experiment: 4

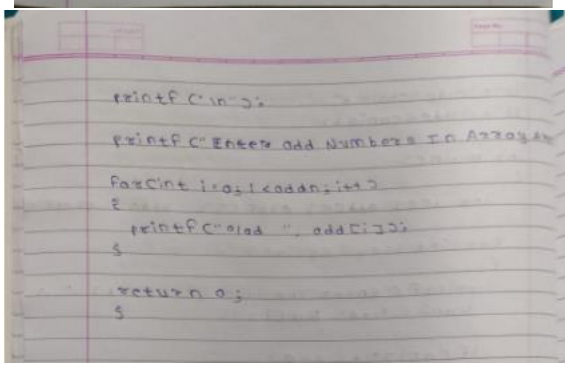
Aim: Write a program to find out all the even and odd numbers present in an array.

Software: Dev C++

Code:-



```
4)  #include<stdio.h>
    #include<conio.h>

    int main()
    {
      int a[5], odd[5], even[5], oddn=0,evenn=0;

      for(int i=0;i<5;i++)
      {
        printf("Enter The Value at a[%d]:",i);
        scanf("%d", &a[i]);

        if(a[i]%2==0)
        {
          even[evenn]=a[i];
          evenn++;
        }

        else
        {
          odd[oddn]=a[i];
          oddn++;
        }
      }

      printf("Even Numbers In Array Are:\n");

      for(int i=0;i<evenn;i++)
      {
        printf("%d ", even[i]);
      }
```



```
      printf("\n");

      printf("Enter odd Numbers In Array:\n");

      for(int i=0;i<oddn;i++)
      {
        printf("%d ", odd[i]);
      }

      return 0;
    }
```

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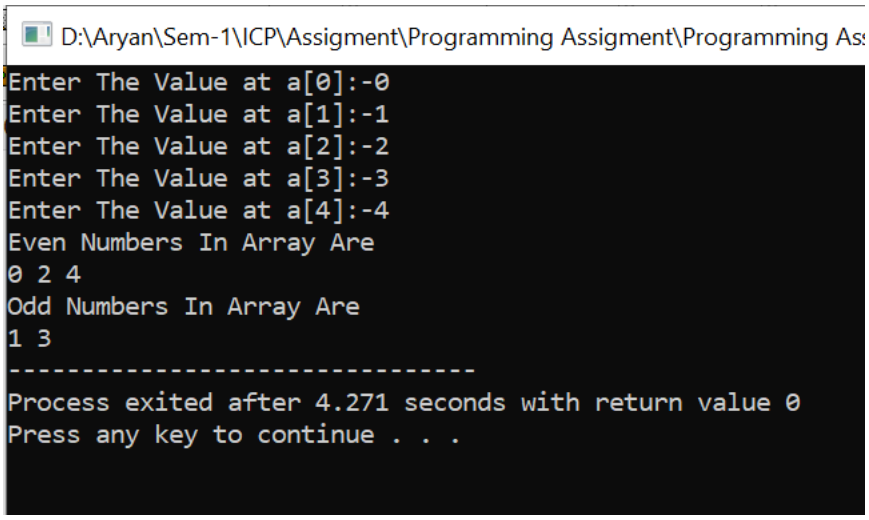
Output:-



Experiment: 5

Aim:- Accept 5 numbers in an array and find maximum and minimum value.

Software:- Dev C++

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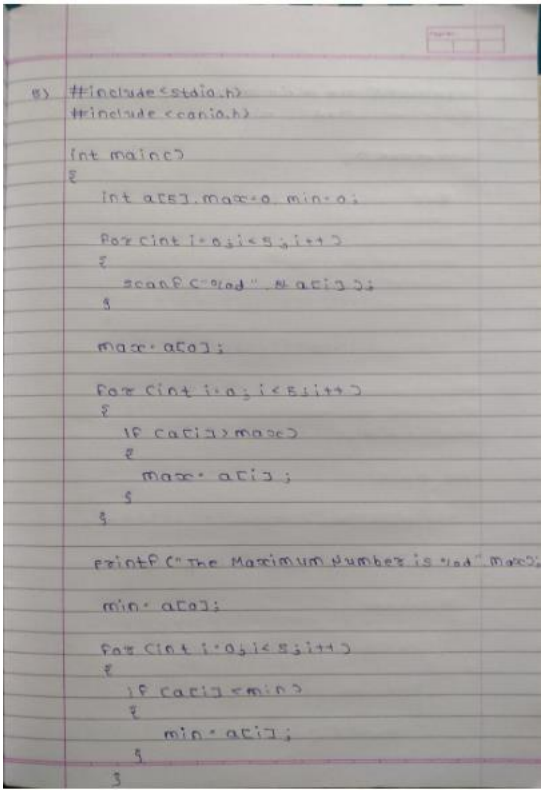
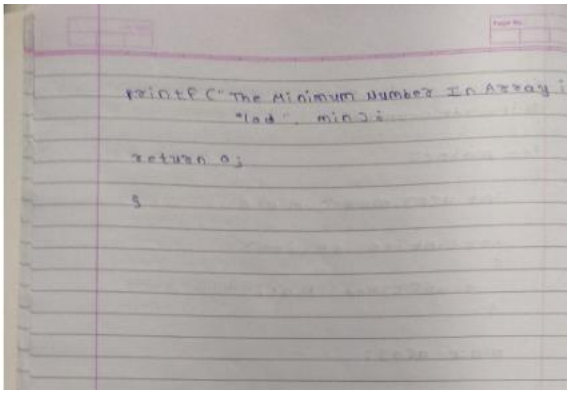
Code:-



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

int main()
{
  int a[5],max=0,min=0;

  for(int i=0;i<5;i++)
  {
    scanf("%d",&a[i]);
  }

  max=a[0];

  for(int i=0;i<5;i++)
  {
    if(a[i]>max)
    {
      max=a[i];
    }
  }

  printf("The Maximum Number is %d",max);

  min=a[0];

  for(int i=0;i<5;i++)
  {
    if(a[i]<min)
    {
      min=a[i];
    }
  }
```



```
printf("The Minimum Number In Array
"%d",min);

return 0;

}
```

Output:-

```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming Assi
Enter The Number at a[0]:-0
Enter The Number at a[1]:-1
Enter The Number at a[2]:-2
Enter The Number at a[3]:-3
Enter The Number at a[4]:-4
The Maximum Number In an Array Is 4
The Minimum Number In an Array Is 0
--------------------------------
Process exited after 5.206 seconds with return value 0
Press any key to continue . . .
```

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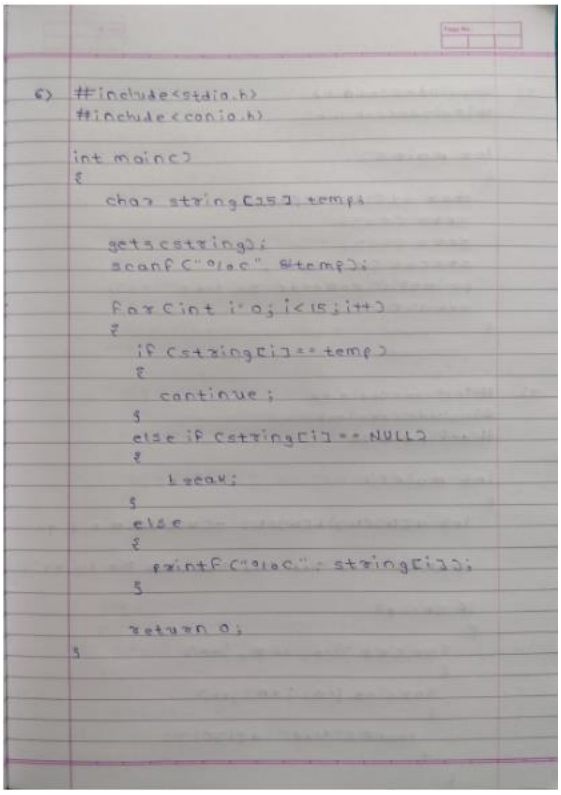
Experiment: 6

Aim:- Write a program to delete a word from a string.

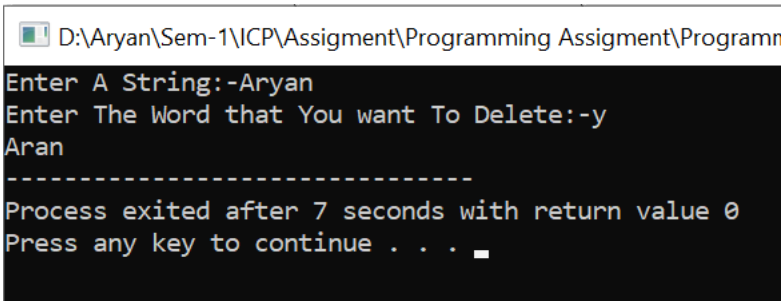
Software:- Dev C++

Code:-



```c
#include<stdio.h>
#include<conio.h>

int main()
{
   char string[15], temp;

   gets(string);
   scanf("%c", &temp);

   for(int i=0; i<15; i++)
   {
     if(string[i]==temp)
     {
       continue;
     }
     else if(string[i]==NULL)
     {
        break;
     }
     else
     {
       printf("%c", string[i]);
     }

     return 0;
}
```

Output:-



```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programm
Enter A String:-Aryan
Enter The Word that You want To Delete:-y
Aran
--------------------------------
Process exited after 7 seconds with return value 0
Press any key to continue . . .
```

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Experiment: 7

Aim:- Write a program to find the longest word in a string

Software:- Dev C++

Code:-

Output:-

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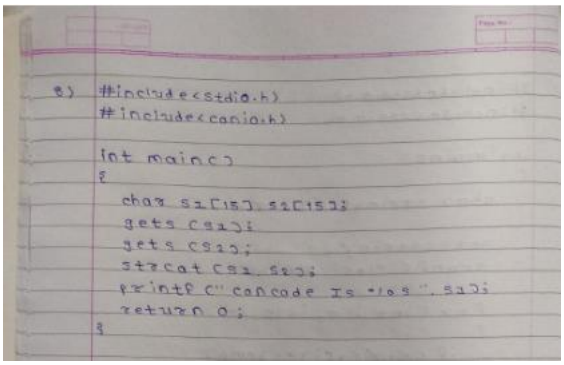
Experiment: 8

Aim:- Get two strings from user and merge it into first string.

Software:- Dev C++

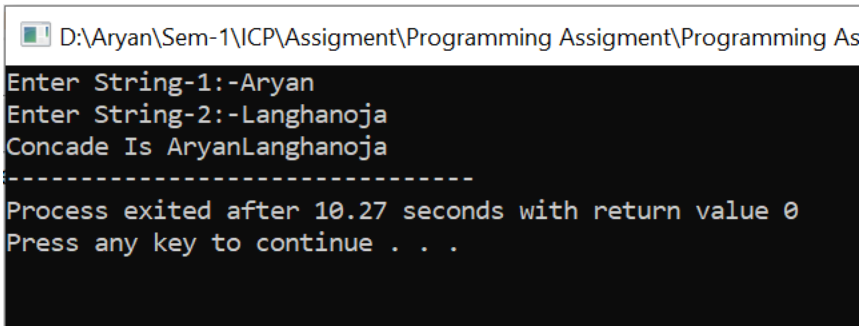
Code:-



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

int main()
{
  char s1[15], s2[15];
  gets(s1);
  gets(s2);
  strcat(s1, s2);
  printf("concode Is %s", s1);
  return 0;
}
```

Output:-



```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming As
Enter String-1:-Aryan
Enter String-2:-Langhanoja
Concade Is AryanLanghanoja
--------------------------------
Process exited after 10.27 seconds with return value 0
Press any key to continue . . .
```

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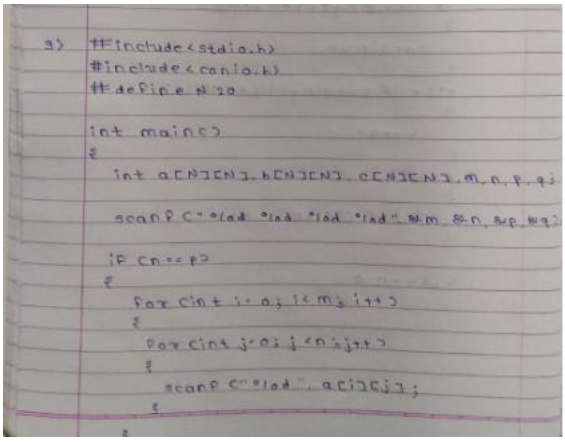
Experiment: 9

Aim:- Write a program to multiply two matrices

Software:- Dev C++

Code:-

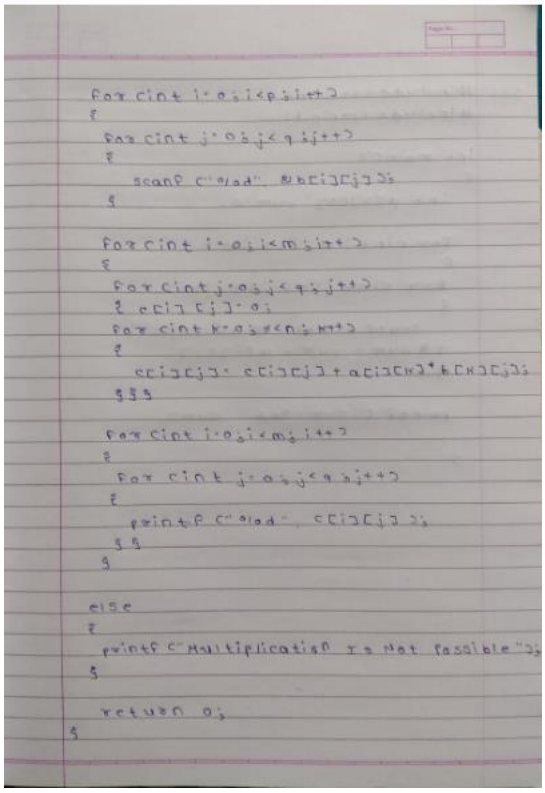


```
#include<stdio.h>
#include<conio.h>
#define N 20

int main()
{
  int a[N][N],b[N][N],c[N][N],m,n,p,q;

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

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



```
for(int i=0;i<p;i++)
{
 for(int j=0;j<q;j++)
 {
   scanf("%d",&b[i][j]);
 }

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

 for(int i=0;i<m;i++)
 {
  for(int j=0;j<q;j++)
  {
   printf("%d",c[i][j]);
  }}

 else
 {
  printf("Multiplication is Not Possible");
 }

 return 0;
}
```

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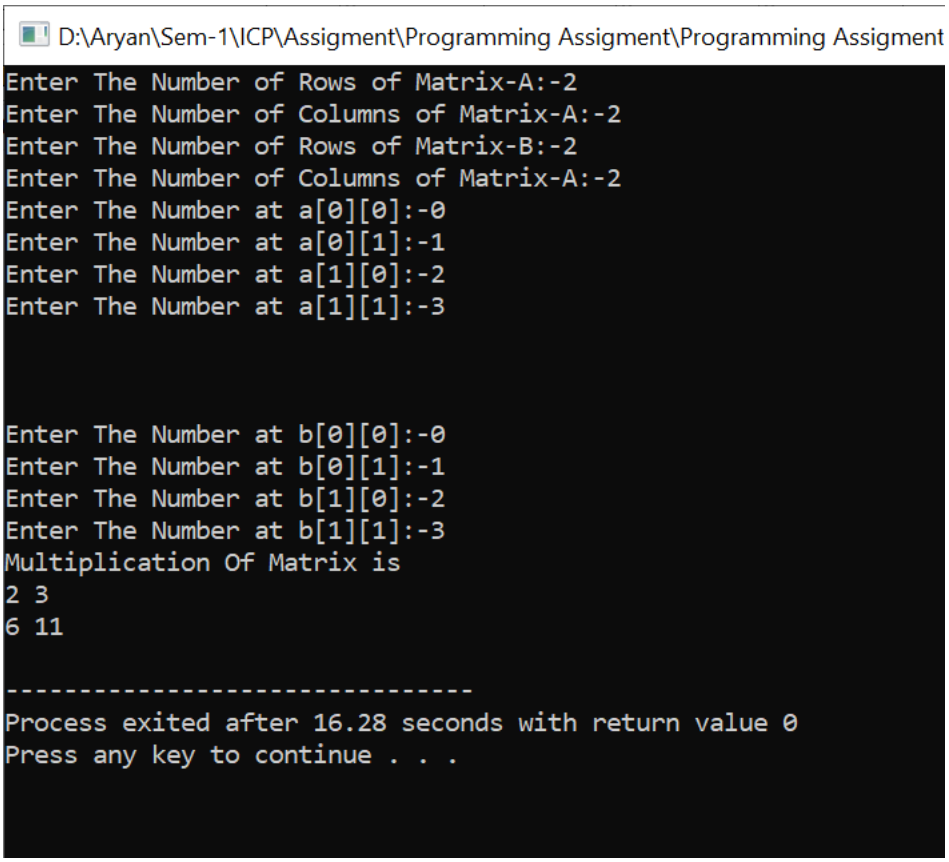
Output:-



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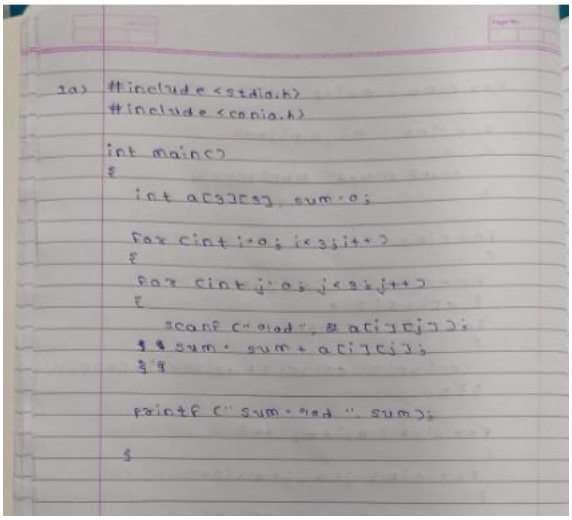
Experiment: 10

Aim:- Write a program to add all the elements of a matrix

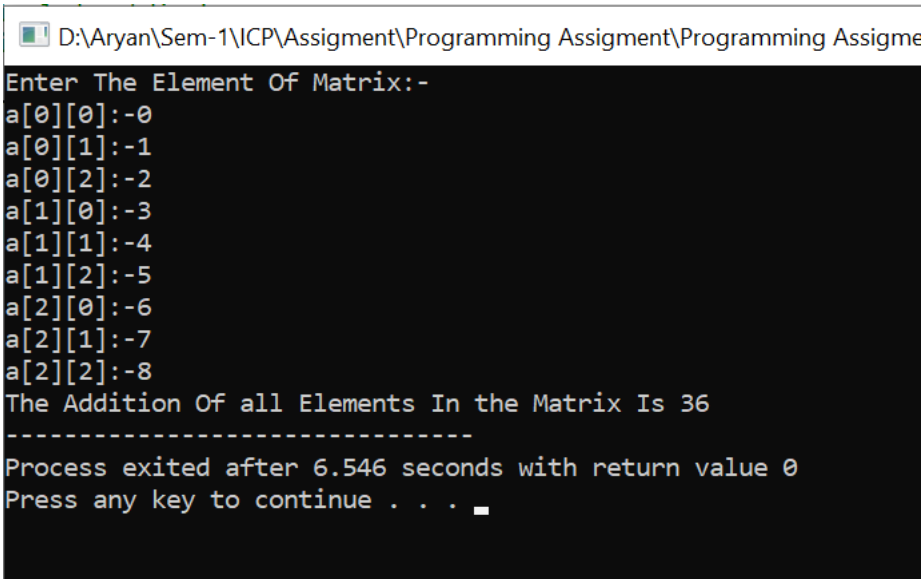
Software:- Dev C++

Code:-



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

int main()
{
  int a[3][3], sum=0;

  for(int i=0; i<3; i++)
  {
  for(int j=0; j<3; j++)
  {
    scanf("%d", &a[i][j]);
  sum= sum+a[i][j];
  }}

  printf("sum=%d", sum);

}
```

Output:-



```
D:\Aryan\Sem-1\ICP\Assigment\Programming Assigment\Programming Assigme
Enter The Element Of Matrix:-
a[0][0]:-0
a[0][1]:-1
a[0][2]:-2
a[1][0]:-3
a[1][1]:-4
a[1][2]:-5
a[2][0]:-6
a[2][1]:-7
a[2][2]:-8
The Addition Of all Elements In the Matrix Is 36
--------------------------------
Process exited after 6.546 seconds with return value 0
Press any key to continue . . .
```

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