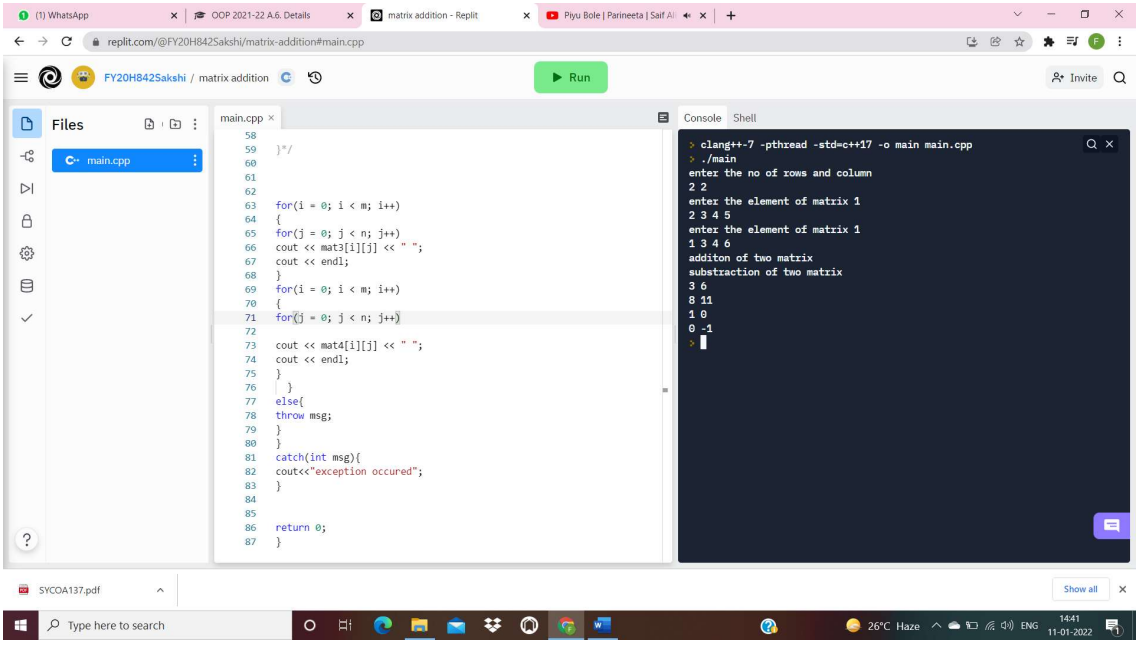
Assingment no 6-

```
#include<iostream>
using namespace std;
class ADT{
int x;
};

int main()
{
//fill your code
int msg;
int m, n;
cout<<"enter the no of rows and column"<<endl;
cin >> m >> n;
try{
  if(m<=2 || n<=2){
int i, j;
int mat1[m][n], mat2[m][n], mat3[m][n] , mat4[m][n];
 //mat5[m][n];
 cout<<"enter the element of matrix 1"<<endl;
for(i = 0; i < m; i++)
{
for(j = 0; j < n; j++)
//cout<<"enter the element of matrix 1"<<endl;
cin >> mat1[i][j];
}
cout<<"enter the element of matrix 1"<<endl;
for(i = 0; i < n; i++)
{
for(j = 0; j < n; j++)
//cout<<"enter the element of matrix 1"<<endl;
```

```
cin >> mat2[i][j];
}
cout<<"additon of two matrix"<<endl;
for(i = 0; i < m; i++)
{
for(j = 0; j < n; j++)
{
mat3[i][j] = mat1[i][j]+ mat2[i][j];
}
}
cout<<"substraction of two matrix"<<endl;
for(i = 0; i < m; i++)
{
for(j = 0; j < n; j++)
{
mat4[i][j] = mat1[i][j]- mat2[i][j];
}



}
/*for(i = 0; i < m; i++)
{
for(j = 0; j < n; j++)
{
mat5[i][j] = mat1[i][j]* mat2[i][j];
}



}*/
```

```
for(i = 0; i < m; i++)
{
for(j = 0; j < n; j++)
cout << mat3[i][j] << " ";
cout << endl;
}
for(i = 0; i < m; i++)
{
for(j = 0; j < n; j++)

cout << mat4[i][j] << " ";
cout << endl;
}
  }
else{
throw msg;
}
}
catch(int msg){
cout<<"exception occured";
}



return 0;
}
```




```
#include <iostream>

using namespace std;

class ADT{
  int x;

};


int main()

{

int m, n, p, q, c, d, k, sum = 0;

int msg;

try{
  if(m<=2 || n<=2)
  {

int mat1[10][10], mat2[10][10], mat3[10][10];


cout << "Enter number of rows and columns of matrix1\n";

cin >> m >> n;

cout << "Enter elements of matrix 1\n";


for (c = 0; c < m; c++)
```

```
for (d = 0; d < n; d++)
cin >> mat1[c][d];

cout << "\nEnter number of rows and columns of matrix2\n";
cin >> p >> q;

if (n != p)
cout << "\nThe matrices can’t be multiplied with each other.\n";
else
{
cout << "\nEnter elements of matrix2\n";

for (c = 0; c < p; c++)
for (d = 0; d < q; d++)
cin >> mat2[c][d];

for (c = 0; c < m; c++) {
for (d = 0; d < q; d++) {
for (k = 0; k < p; k++) {
sum = sum + mat1[c][k]*mat2[k][d];
}

mat3[c][d] = sum;
sum = 0;
}
}

cout << "\nProduct of the matrices:\n";

for (c = 0; c < m; c++) {
for (d = 0; d < q; d++)
```

```
cout << mat3[c][d] << " ";


cout << endl;
}
}
  }
else{
  throw msg;
}
}
catch(int msg){
  cout<<"exception occured"<<endl;
}
return 0;
}
```