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Section: bscs

Q1:

#*include* <iostream>

using namespace std;

int *main*(){

//*creating two array of size 6x6*

int array[6][6];

float result[6][6];

//*getting inputs from user*

*for*(int i = 0; i < 6 ; i++){

*for*(int j = 0; j < 6; j++){

cout *<<* "enter the value for ["*<<*i*<<*"]"*<<*"["*<<*j*<<*"] "; cin*>>*array[i][j];//*appending the values in array*

}

}

*for*(int i = 0; i < 6 ; i++){

*for*(int j = 0; j < 6; j++){

cout *<<*array[i][j] *<<*" \t";// *printing the values of array*

}

cout *<<endl*;

}

//*performing opperation on the array*

*for*(int i = 0; i < 6 ; i++){

*for*(int j = 0; j < 6; j++){

float Sum = 0.0;

*if*(i == 0 && j == 0){

Sum = array[i][j+1]+array[i+1][j+1]+array[i+1][j];

Sum = Sum/array[i][j];

result[i][j] = Sum;// *appending the value in the new result array*

}

*else* *if*(i == 0 && j == 5){

Sum = array[i][j-1]+array[i+1][j-1]+array[i+1][j];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

*else* *if*(i == 0 && j < 5){

Sum = array[i][j-1]+array[i+1][j-1]+array[i+1][j]+array[i+1][j+1]+array[i][j+1];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

*else* *if*(i < 5 && j == 0){

Sum = array[i-1][j]+array[i-1][j+1]+array[i][j+1]+array[i+1][j+1]+array[i+1][j];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

*else* *if*(i == 5 && j == 0){

Sum = array[i-1][j]+array[i-1][j+1]+array[i][j+1];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

*else* *if*(i == 5 && j == 5){

Sum = array[i-1][j]+array[i-1][j-1]+array[i][j-1];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

*else* *if* (i == 5 && j < 5){

Sum = array[i-1][j]+array[i-1][j+1]+array[i][j+1]+array[i-1][j-1]+array[i][j-1];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

*else* *if*(i < 5 && j == 5 ){

Sum = array[i-1][j]+array[i-1][j-1]+array[i][j-1]+array[i+1][j-1]+array[i+1][j];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

*else*{

Sum = array[i-1][j]+array[i-1][j-1]+array[i][j-1]+array[i+1][j-1]+array[i+1][j]+array[i+1][j+1]+array[i][j+1]+array[i-1][j+1];

Sum = Sum/array[i][j];

result[i][j] = Sum;

}

}

cout *<<endl*;

}

cout *<<*"\nresult array: " *<<endl*;

*for*(int i = 0; i < 6 ; i++){

*for*(int j = 0; j < 6; j++){

cout *<<*result[i][j] *<<*" \t";// *printing the values of the result array*

}

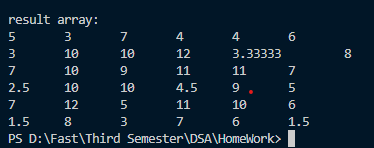
cout *<<endl*;

}

// *cout <<" the value of result is: " <<result[0][0];*

}

Screenshot:



Q2:

#*include* <iostream>

#*include* <conio.h>

using namespace std;

void *print*(int*\**, int*\**);

int *main*(){

int number, limit, key;

int\* ptrNum = *NULL*;

int\* ptrLim = *NULL*;

int\* ptrKey = *NULL*;

ptrKey = &key;

ptrNum = &number;

ptrLim = &limit;

*do*{

cout *<<* "enter the table number: "; cin*>>* \*ptrNum;

cout *<<*"enter the table limit: "; cin*>>* \*ptrLim;

*print*(ptrNum, ptrLim);

*getch*();

cout *<<*"press 1 for again and press 0 to quit: "; cin *>>* \*ptrKey;

}

*while*( key != 0);

}

void *print*(int*\** num, int*\** lim){

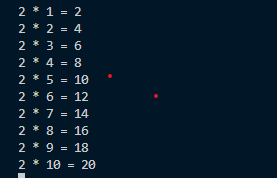
*for*(int i = 1; i <= \*lim; i++){

cout*<<*\*num *<<*" \* " *<<* i *<<* " = " *<<* \*num \* i *<<* *endl*;

}

}

Screenshot:



Q3:

#*include* <iostream>

#*include* <fstream>

using namespace std;

int *main*(){

int array[5][5];// *creating array*

int result[5];

int number;

ifstream myfile;

myfile.*open*("file.txt");//*opeing file*

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

*for*(int j = 0; j < 5; j++){

int temp;

myfile *>>* temp;

array[i][j] = temp;//*reading data from file and appending in new array*

}

}

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

int Sum = 0;

*for*(int j = 0; j < 5; j++){

Sum += array[i][j];//*calculating the sum of a row*

}

result[i] = Sum;//*appending sum in result*

}

cout *<<*"[ ";

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

cout *<<* result[i]*<<* ", ";//*printing the new array*

}

cout*<<*"]";

}

Screenshot:



Q4:

#*include*<iostream>

#*include*<regex>

using namespace std;

bool *checkingEmail*(string email)

{

regex *pattern*("(\\w+)(\\.|\_)?(\\w\*)@(\\w+)(\\.(\\w+))+");

*return* *regex\_match*(email,pattern);

}

int *main*()

{

string str;

cout*<<*"Enter your Email-Id:"*<<endl*;

cin*>>*str;

*if*(*checkingEmail*(str))

cout*<<*"Your Email-Id is valid"*<<endl*;

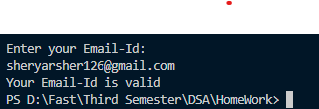
*else*

cout*<<*"Your Email-Id is invalid"*<<endl*;

*return* 0;

}

Screenshot:



Q5:

#*include*<iostream>

#*include*<regex>

using namespace std;

bool *passwordChecking*(string password)

{

regex *pattern*("(?=.\*[a-z])(?=.\*[0-9])(?=.\*[A-Z])(?=.\*[!@#$%?/~\_+-=])[a-zA-Z0-9!?].{5,11}");

*return* *regex\_match*(password,pattern);

}

int *main*()

{

string str;

cout*<<*"Enter your password:"*<<endl*;

cin*>>*str;

*if*(*passwordChecking*(str))

cout*<<*"Your password is valid"*<<endl*;

*else*

cout*<<*"Your password is invalid"*<<endl*;

*return* 0;

}

Screenshot:

