#include "mysql.h"

#include <cstdio>

#include <cstdlib>

#include <string>

#include <iostream>

#include <sstream>

using namespace std;

bool  IL1tracker = false;

bool IL2tracker  = false;

bool PC1tracker = false;

MYSQL \*con = mysql\_init(NULL);

void finish\_with\_error(MYSQL \*con)

{

  fprintf(stderr, "%s\n", mysql\_error(con));

  mysql\_close(con);

  exit(1);

}

int main(){

  if (con == NULL) {

      fprintf(stderr, "%s\n", mysql\_error(con));

      exit(1);

  }

if (mysql\_real\_connect(con,"localhost", "root", "55011392MM", "testdb", 0, NULL, 0) == NULL) {

        finish\_with\_error(con);

  }

MYSQL\_RES \*please = mysql\_store\_result(con);

if (please == NULL)

{

      finish\_with\_error(con);

}

MYSQL\_ROW pleasee;

while((pleasee=mysql\_fetch\_row(please))){

        string sensorID=pleasee[2];

        int percent=0;

        if(sensorID.compare("IL1")==0){

                IL1tracker=true;

        }

         if(sensorID.compare("IL2")==0){

                IL2tracker=true;}

        else if(sensorID.compare("PC1")==0){

                PC1tracker=true;;

        }

}

if (mysql\_query(con,"select NumPPL from output\_table WHERE RstrntID=1")){

     finish\_with\_error(con);

  }

MYSQL\_RES \*result = mysql\_store\_result(con);

if (result == NULL)

{

      finish\_with\_error(con);

}

MYSQL\_ROW row;

row=mysql\_fetch\_row(result);

int np = atoi(row[0]);

cout <<"Number of people: " <<  np << endl;

if (mysql\_query(con,"select linelength from restaurantinfotable WHERE RstrntID=1")){

     finish\_with\_error(con);

  }

MYSQL\_RES \*feet = mysql\_store\_result(con);

if (feet == NULL)

{

      finish\_with\_error(con);

}

MYSQL\_ROW feett;

feett=mysql\_fetch\_row(feet);

int total = atoi(feett[0]);

cout << "Total feet: "<< total << endl;

float z =2.5;

float x = np \* z;

cout <<"Number of feet taken up: " << x << endl;

int percent =0;

double twoThirdsMark = 2\*total/3;

cout << "twoThirdsMark: " << twoThirdsMark << endl;

double fullMark = total - 1;

double oneThirdsMark =total/3;

cout << "oneThirdsMark: " << oneThirdsMark<< endl;

cout << "fullMark: " << fullMark<< endl;;

cout << "IL1: " << IL1tracker << endl;

cout << "IL2: " << IL2tracker << endl;

if( x >= fullMark && IL1tracker && IL2tracker)

{

         percent =100;

        cout << 100<<endl;}

else if ( twoThirdsMark <= x && x <fullMark && IL1tracker && IL2tracker){

        percent =66;

        cout << 66 <<endl;}

else if (oneThirdsMark<= x && x<= twoThirdsMark && IL1tracker){

        percent =33;

        cout << 33 << endl;}

else{

        percent = 0;

        cout << 0 << endl;

}

stringstream percentSStr;

percentSStr << percent;

string percentStr = percentSStr.str();

cout << percentStr << endl;

string updateStatement = "UPDATE output\_table SET PercentFull=" + percentSStr.str() + "  WHERE RstrntID=1";

if (mysql\_query(con, updateStatement.c\_str())) {

                finish\_with\_error(con);

        }

  mysql\_free\_result(result);

  mysql\_free\_result(feet);

  mysql\_close(con);

  exit (0);

}