**Assignment 1.(Student Database).**

#include <iostream>

#include<algorithm>

using namespace std;

class student{

int marks[60],rollno[60],cnt=0;

string name[60];

public:

void accept(){

cout<<endl<<"Enter count:";

cin>>cnt;

for(int i=0;i<cnt;i++){

cout<<endl<<"Enter name:";

cin>>name[i];

cout<<endl<<"Enter rollno:";

cin>>rollno[i];

cout<<endl<<"Enter marks:";

cin>>marks[i];

}

}

void display(){

cout<<endl;

for(int i=0;i<cnt;i++){

cout<<endl<<name[i]<<"\t"<<rollno[i]<<"\t"<<marks[i];

}

}

void high(){

int high=0;

for(int i=0;i<cnt;i++){

if(marks[i]>=high){

high=marks[i];

}

}

cout<<endl<<"Highest score:"<<high;

}

void low(){

int low=50;

for(int i=0;i<cnt;i++){

if(marks[i]<=low){

low=marks[i];

}

}

cout<<endl<<"Lowest score:"<<low;

}

void average(){

int total=0;

for(int i=0;i<cnt;i++){

total=total+marks[i];

}

int avg=total/cnt;

cout<<endl<<"Average marks:"<<avg;

}

void maxScored(){

sort(marks,marks+cnt);

int maxcnt=1,currcnt=1,res=marks[0];

for(int i=0;i<cnt;i++){

if(marks[i]==marks[i-1]){

currcnt++;

}else{

if(currcnt>maxcnt){

maxcnt=currcnt;

res=marks[i-1];

}

currcnt=1;

}

}

cout<<endl<<"most scored number is:"<<res<<" occurred "<<maxcnt<<" times";

}

void absent(){

cout<<endl<<"List of absent students:";

for(int i=0;i<cnt;i++){

if(marks[i]==-1){

cout<<endl<<name[i]<<"\t"<<rollno[i]<<"\t"<<marks[i];

}

}

}

};

int main()

{

student s1;

int ch;

do{

cout<<endl<<"1.accept data...\n2.display data..\n3.Find average...\n4.highest and lowest number...\n5.max scored number...\n6.Absent students...";

cout<<endl<<"Enter your choice:";

cin>>ch;

switch(ch){

case 1:

s1.accept();

break;

case 2:

s1.display();

break;

case 3:

s1.average();

break;

case 4:

s1.high();

s1.low();

break;

case 5:

s1.maxScored();

break;

case 6:

s1.absent();

break;

}

}while(ch!=7);

return 0;

}