***TASK - 01;***

#include<iostream>

#include<vector>

using namespace std;

int main(){

vector<int>vec;

for(int i=0;i<10;i++){

vec.push\_back(i\*2);

}

cout<<"the pushed integers are ";

for(int i=0;i<vec.size();i++){

cout<<vec[i]<<" ";

}

cout<<endl;

vec.push\_back(5);

int positionToRemove=9;

if(positionToRemove>=0&&positionToRemove<10){

vec.erase(vec.begin()+positionToRemove);

cout<<"the pushed integers after removing the element "<<" ";

for(int i=0;i<vec.size();i++){

cout<<vec[i]<<" "; } }

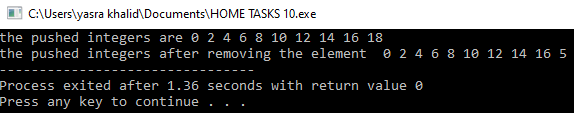
else{

cout<<"the given position is invalid ";

}

return 0; }

***OUTPUT ;***

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***TASK - 02;***

#include<iostream>

#include<vector>

#include<string>

using namespace std;

int main(){

int pair;

cout<<"enter pairs of numbers for name and grade "<<endl;

cin>>pair;

vector<string> names(pair);

vector<int> grades(pair);

cout<<"enter the names "<<endl;

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

cin>>names[i];

}

cout<<"enter the grades "<<endl;

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

cin>>grades[i];

}

cout<<"entered names are "<<endl;

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

cout<<names[i]<<","<<" ";

}

cout<<endl;

cout<<"entered grades are "<<endl;

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

cout<<grades[i]<<","<<" ";

}

double mean,sum= 0;

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

sum +=grades[i];

}

cout<<endl;

cout<<"1)the mean of the grades is "<<" ";

mean=sum/pair;

cout<<mean<<endl;

double median;

if(pair%2!=0){

int med=(pair/2);

cout<<"2)the median of grades is "<<grades[med]<<endl;

}

else{

int med1=pair/2;

int med2=(pair-2)/2;

cout<<"2)the median of the grades are "<<grades[med2]<<" & "<<grades[med1]<<endl;

}

int mode,currentCount=1,maxCount=1;

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

if(grades[i]==grades[i+1]){

currentCount++;

}

else{

if(currentCount==1){

cout<<"3)there is no mode of the grade"<<endl;

break;

}

}

if(currentCount>maxCount){

maxCount=currentCount;

mode=grades[i];

}

}

if(currentCount!=1){

cout<<"3)the mode of grades is "<<mode<<endl;

}

cout<<"4)the name and grade of std are as follow "<<endl;

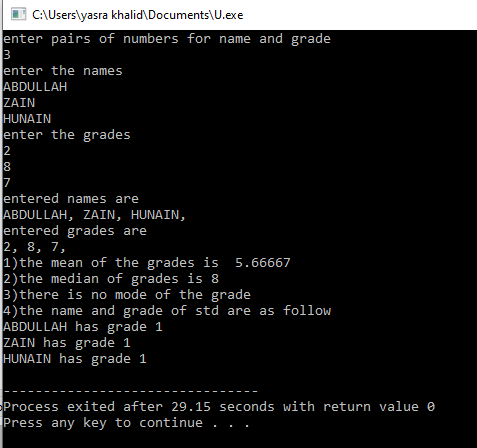
for(int i=0;i<pair;i++){

cout<<names[i]<<" has grade "<<mode<<endl;

}

}

***OUTPUT ;***

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