THIS C++ PROGRAM is developed by S M OHIDUL ALAM,and is opened for all to edit,copy and usation by giving credit.

#include <iostream>

#include <stdlib.h>

using namespace std;

void calculateGPA();

void calculateCGPA();

void method();

int main()

{

system("cls");

int input;

cout<<"--------------------------------------------------------------------------"<<endl;

cout<<" GPA & CGPA Calculator (Developed by Ohid) "<<endl;

cout<<"--------------------------------------------------------------------------\n"<<endl;

cout<<" MENU:"<<endl;

cout<<" 1. Calculate GPA (Grade Point Average)"<<endl;

cout<<" 2. Calculate CGPA (Cummulative Grade Point Average)"<<endl;

cout<<" 3. Method that is applied here for calclating GPA & CGPA"<<endl;

cout<<" 4. Exit Application"<<endl;

cout<<"--------------------------------------------------------------------------"<<endl;

sub:

cout<<"Enter your choice: ";

cin>>input;

switch(input)

{

case 1:

calculateGPA();

break;

case 2:

calculateCGPA();

break;

case 3:

method();

break;

case 4:

exit(EXIT\_SUCCESS);

break;

default:

cout<<"You have entered wrong input.Try again!\n"<<endl;

goto sub;

break;

}

}

void calculateGPA()

{

int q;

system("cls");

cout<<"-------------- GPA Calculating -----------------"<<endl;

cout<<" How many subject's points do you want to calculate? : ";

cin>>q;

float credit [q];

float point [q];

cout<<endl;

for(int i=0;i<q;i++)

{

cout<<"Enter the credit for the subject "<<i+1<<": ";

cin>>credit[i];

cout<<endl;

cout<<"Enter the point of the subject "<<i+1<<": ";

cin>>point[i];

cout<<"-----------------------------------\n\n"<<endl;

}

float sum=0;

float tot;

for(int j=0;j<q;j++)

{

tot=credit[j]\*point[j];

sum=sum+tot;

}

float totCr=0;

for(int k=0;k<q;k++)

{

totCr=totCr+credit[k];

}

cout<<"\n\n\nTotal Points: "<<sum<<" . Total Credits: "<<totCr<<" .Total GPA: "<<sum/totCr<<" ."<<endl;

sub:

int inmenu;

cout<<"\n\n\n1. Calculate Again"<<endl;

cout<<"2. Go Back to Main Menu"<<endl;

cout<<"3. Exit This App \n\n"<<endl;

cout<<"Your Input: "<<endl;

cin>>inmenu;

switch(inmenu)

{

case 1:

calculateGPA();

break;

case 2:

main();

break;

case 3:

exit(EXIT\_SUCCESS);

default:

cout<<"\n\nYou have Entered Wrong Input!Please Choose Again!"<<endl;

goto sub;

}

}

void calculateCGPA()

{

system("cls");

int l;

cout<<"-------------- CGPA Calculating -----------------\n\n"<<endl;

cout<<"How many semester results do you want input? :";

cin>>l;

cout<<"\n\n"<<endl;

float semrs[l];

int i;

for(i=0;i<l;i++)

{

cout<<" Enter Semester "<<i+1<<" Result(GPA): ";

cin>>semrs[i];

cout<<"\n"<<endl;

}

float semtot=0;

for(int j=0;j<l;j++)

{

semtot=semtot+semrs[j];

}

cout<<"\*\*\*\*\*\*\*\* Your CGPA is "<<semtot/l<<" \*\*\*\*\*\*\*\*\*\*"<<endl;

sub:

int inmenu;

cout<<"\n\n\n1. Calculate Again"<<endl;

cout<<"2. Go Back to Main Menu"<<endl;

cout<<"3. Exit This App \n\n"<<endl;

cout<<"Your Input: "<<endl;

cin>>inmenu;

switch(inmenu)

{

case 1:

calculateCGPA();

break;

case 2:

main();

break;

case 3:

exit(EXIT\_SUCCESS);

default:

cout<<"\n\nYou have Entered Wrong Input!Please Choose Again!"<<endl;

goto sub;

}

}

void method()

{

system("cls");

cout<<"--------------- Method of Calculating GPA & CGPA ---------------\n\n"<<endl;

cout<<" GPA= Sum of (Credit\*Point) / total of credits \n"<<endl;

cout<<" CGPA= Sum of GPA / number of semesters "<<endl;

cout<<"-----------------------------------------------------------------\n\n"<<endl;

sub:

int inmenu;

cout<<"1. Go Back to Main Menu"<<endl;

cout<<"2. Exit This App \n\n"<<endl;

cout<<"Your Input: "<<endl;

cin>>inmenu;

switch(inmenu)

{

case 1:

main();

break;

case 2:

exit(EXIT\_SUCCESS);

default:

cout<<"\n\nYou have Entered Wrong Input!Please Choose Again!"<<endl;

goto sub;

}

};

cout<<"--------------- Method of Calculating GPA & CGPA ---------------\n\n"<<endl;

cout<<" GPA= Sum of (Credit\*Point) / total of credits \n"<<endl;

cout<<" CGPA= Sum of GPA / number of semesters "<<endl;

cout<<"-----------------------------------------------------------------\n\n"<<endl;

sub:

int inmenu;

cout<<"1. Go Back to Main Menu"<<endl;

cout<<"2. Exit This App \n\n"<<endl;

cout<<"Your Input: "<<endl;

cin>>inmenu;

switch(inmenu)

{

case 1:

main();

break;

case 2:

exit(EXIT\_SUCCESS);

default:

cout<<"\n\nYou have Entered Wrong Input!Please Choose Again!"<<endl;

goto sub;

}

}