

Fundamentals of programming

**Assignment: 2**



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**Task 1:**

#include <iostream>

using namespace std;

int main() {

double marks;

cout << "Enter the student's marks: ";

cin >> marks;

char grade;

if (marks >= 90) {

grade = 'A';

} else if (marks >= 75) {

grade = 'B';

} else if (marks >= 60) {

grade = 'C';

} else if (marks >= 45) {

grade = 'D';

} else {

grade = 'F';

}

cout << "Your grade is: " << grade << std::endl;

return 0;

}

**Task 2:**

#include <iostream>

using namespace std;

int main() {

int number;

cout << "Enter the number: ";

cin >> number;

int isEven = (number % 2 == 0);

int isDivisibleBy5 = (number % 5 == 0);

if (isEven && isDivisibleBy5) {

cout << number << " is even and divisible by 5." << endl;

}

else {

cout << number << " is either not even or it is not divisible by 5." << endl;

}

return 0;

}

**Task 3:**

#include <iostream>

using namespace std;

int main() {

int year;

cout << "Enter a year: ";

cin >> year;

bool isLeapYear = false;

if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {

isLeapYear = true;

}

if (isLeapYear) {

cout << year << " is a leap year." <<endl;

} else {

cout << year << " is not a leap year." <<endl;

}

return 0;

}

**Task 4:**

#include <iostream>

using namespace std;

int main ()

{

float GPA;

float attendence;

cout << "Enter the GPA: ";

cin >> GPA ;

cout << "Enter the Percentage attendence: ";

cin >> attendence;

if (attendence>= 80 && GPA >= 3.5) {

cout << "Congralutions! you are elligible for the scholarship." << endl;

}

else {

cout << " Sorry, you are not eligible for scholarship." <<endl;

}

return 0;

}

**Task 5:**

#include <iostream>

using namespace std;

int main ()

{

char alphabet;

cout << "Enter the character: ";

cin >> alphabet ;

if (alphabet == 'a'|| alphabet == 'e' || alphabet == 'i' || alphabet == 'o' || alphabet == 'u'

|| alphabet == 'A'|| alphabet == 'E' || alphabet == 'I' || alphabet == 'O' || alphabet == 'U')

{

cout << "The character is a vowel." << endl;

}

else {

cout << " The character is a consonant." <<endl;

}

return 0;

}