COMPUTER SYSTEM AND PROGRAMMING

ASSIGNMENT # 2

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- Section: B
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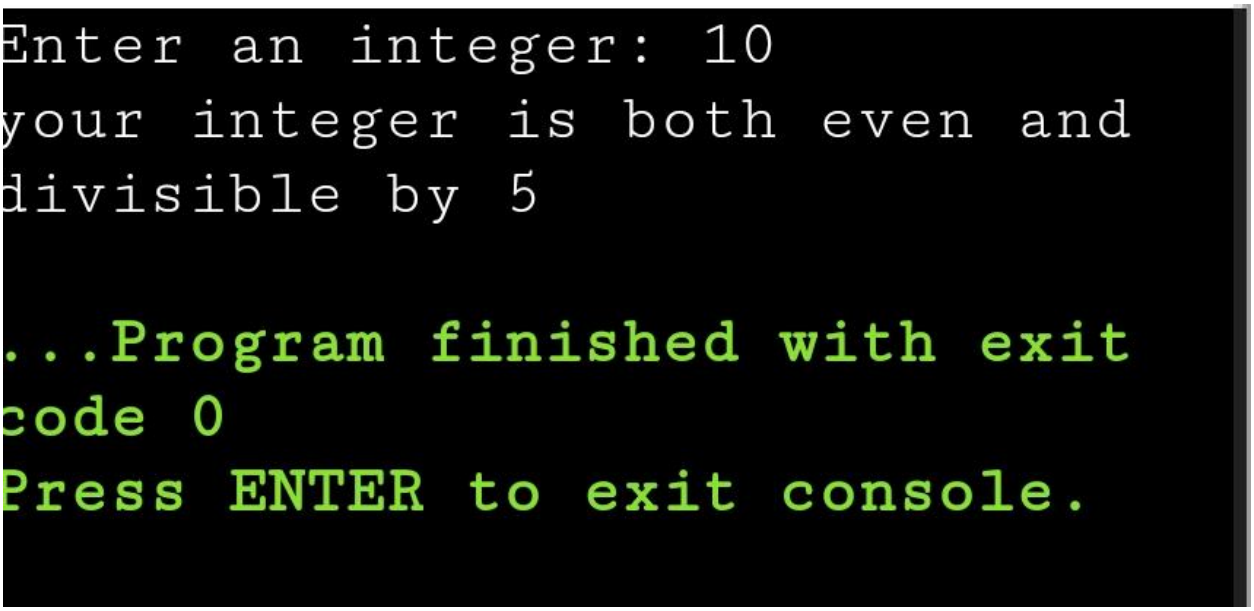
Task # 1

- **Code:**

```
#include <iostream>
Using namespace std;

Int main()
{
   Int n;
   Cout << “Enter an integer: “;
   Cin >> n;


   If (n % 2 == 0 && n % 5 == 0)
   {
      Cout << “your integer is both even and divisible by 5”;
   }
   Else
   {
      Cout << “your integer is not both even and divisible by 5”;
   }

   Return 0;
}
```

- **Result:**



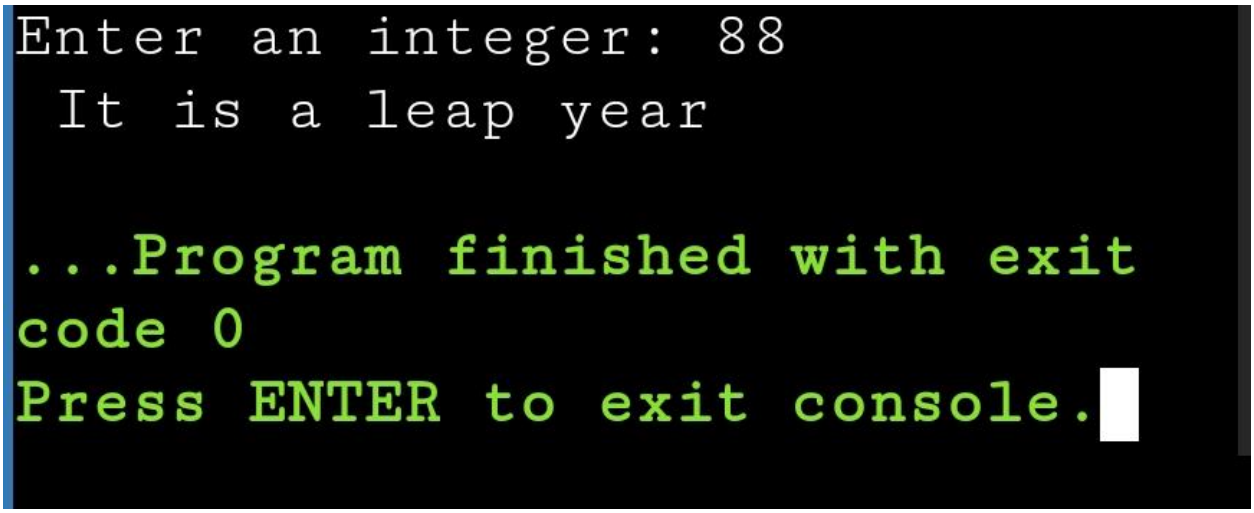
Task # 2

- **Code:**

```
#include <iostream>
Using namespace std;

Int main()
{
   Int n;
   Cout << "Enter an integer: ";
   Cin >> n;


   If (n % 4 == 0)
   {
      Cout << " It is a leap year";
   }
   Else
   {
      Cout << "it is not a leap year";
   }
```

Return 0;
}

- **Result:**



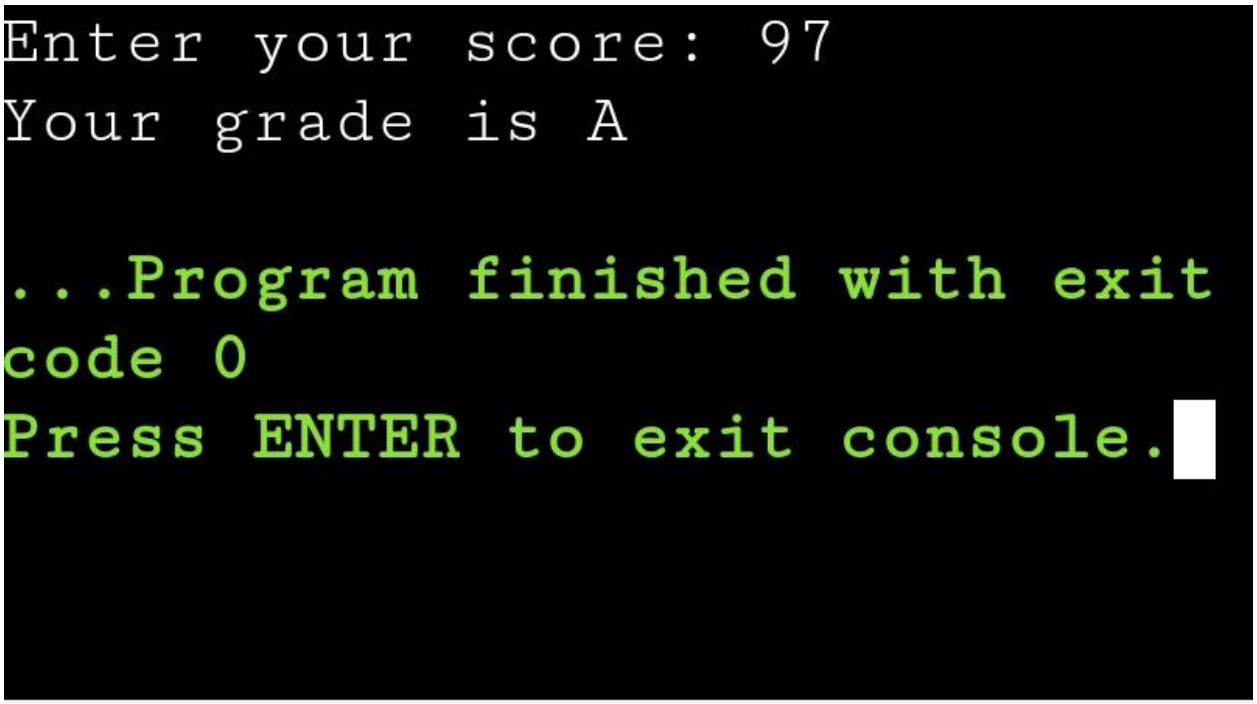
Task # 3

- **Code:**

```
#include <iostream>
Using namespace std;

Int main()
{
   // Declare a variable to store the student's score
   Int score;

   // Prompt the user to enter the score
   Cout << "Enter your score: ";
```

```
    Cin >> score;

    // Check if the score is valid (between 0 and 100)
    If (score >= 0 && score <= 100)
    {
      // Assign a grade based on the predefined criteria using logical operators
      If (score >= 90)
      {
        Cout << “Your grade is A”;
      }
      Else if (score >= 75)
      {
        Cout << “Your grade is B”;
      }
      Else if (score >= 60)
      {
        Cout << “Your grade is C”;
      }
      Else if (score >= 45)
      {
        Cout << “Your grade is D”;
      }
      Else
      {
        Cout << “Your grade is F”;
      }
    }
    Else
    {
      // Display an error message if the score is invalid
      Cout << “Invalid score. Please enter a number between 0 and 100.\n”;
    }

    Return 0;
}
```

- **Result:**



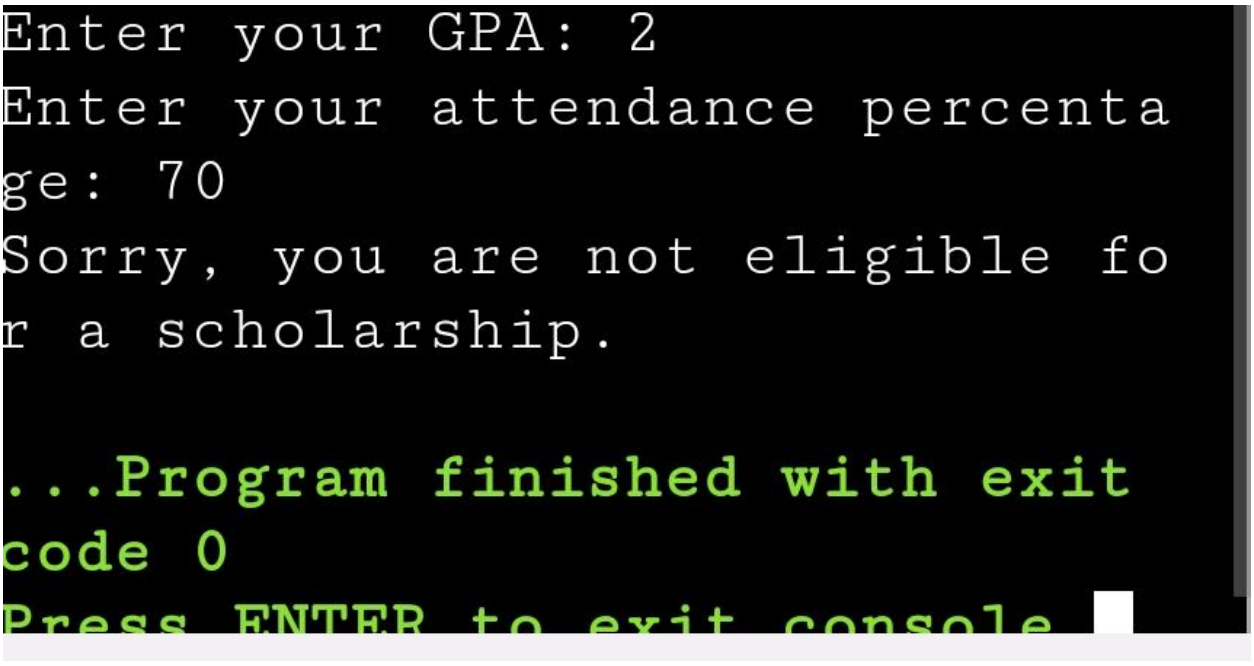
Task # 4

- **Code:**

```
#include <iostream>
Using namespace std;

Int main()
{
   Float gpa;
   Float attendance;

   Cout << “Enter your GPA: “;
   Cin >> gpa;
   Cout << “Enter your attendance percentage: “;
   Cin >> attendance;

   If (gpa >= 3.5 && attendance >= 80)
   {
      Cout << “Congratulations! You are eligible for a scholarship.”;
   }
   Else
   {
```

```
        Cout << “Sorry, you are not eligible for a scholarship.”;
    }

    Return 0;
}
```

- **Result:**



Task # 5

- **Code:**

```
#include <iostream>

Using namespace std;


Int main()

{

   Char c;

   Cout << “Enter a character: “;

   Cin >> c;
```

```
    If (c == ‘a’ || c == ‘e’ || c == ‘I’ || c == ‘o’ || c == ‘u’ ||
       C == ‘A’ || c == ‘E’ || c == ‘I’ || c == ‘O’ || c == ‘U’)
    {
       Cout << c <<”is a vowel.” << endl;
    }
    Else
    {
       Cout << c << “ is a consonant.” << endl;
    }

    Return 0;
}
```

- **Result:**