

Conditional Statement C Programming Problem (if-else)

1. Write a C program to find the letter grade and grade point from given marks.

Input:

```
#include<stdio.h>

int main()
{
    int mark;
    printf("Enter mark : ");
    scanf("%d",&mark);
    if(mark>100 || mark<0)
        printf("invalid mark");
    else if(mark>=80 && mark<=100)
        printf("A+ 4.0");
    else if(mark>=75 && mark<=79)
        printf("A 3.75");
    else if(mark>=70 && mark<=74)
        printf("A- 3.5");
    else if(mark>=65 && mark<=69)
        printf("B+ 3.25");
```

```
else if(mark>=64 && mark<=60)
printf("B 3.00");
else if(mark>=59 && mark<=55)
printf("B- 2.75 ");
else if(mark>=54 && mark<=50)
printf("C+ 2.50 ");
else if(mark>=49 && mark<=45)
printf("C 2.25 ");
else if(mark>=44 && mark<=40)
printf("D 2.00");
else
printf("F 0");
}
```

Output:

A screenshot of a Windows command prompt window. The title bar at the top shows the file path "C:\Users\User\Documents\lab 2.exe". The command prompt displays the following text: "Enter mark : 80", followed by "A+ 4.0". Below this, it shows "Process returned 0 (0x0) execution time : 3.846 s" and "Press any key to continue." The background of the command prompt is black with white text.

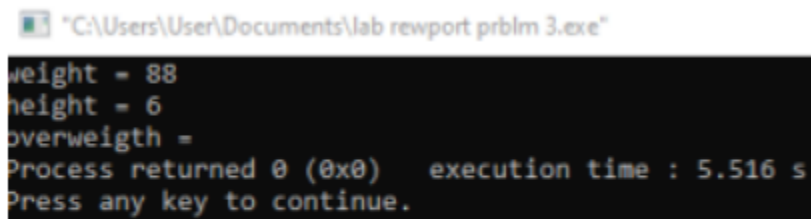
2. Write a program to calculate Body Mass Index (BMI) and display the grade from the following grades: [Use include<math.h> library]

Input:

```
#include<stdio.h>
#include<math.h>
main()
{
double BMI,weight,height;
printf("weight = ");
scanf("%lf",& weight);
printf("height = ");
scanf("%lf",& height);
double height_m = height * 0.3048;
BMI = (weight) / (pow(height_m,2));
if( BMI < 18.5)
printf("underweigh =");
if(BMI>= 18.5 && BMI < 25.0)
printf("normalweigh = " );
```

```
if(BMI >= 25.0 && BMI < 30.0)
printf("overweighth = " );
if(BMI >= 30.0)
printf("obesity = ");
}
```

Output:



```
"C:\Users\User\Documents\lab rework prblm 3.exe"
weight = 88
height = 6
overweighth =
Process returned 0 (0x0)   execution time : 5.516 s
Press any key to continue.
```

3. Write a C to find odd or even number

Input: