**Assignment Title:** conditional statements

**Question**

1. write a c program to check whether a year is leap or not
2. write a c program to find the maximum between 3 numbers.
3. write a c program that calculates percentage, GPA and grade of a student. your program should prompt the user to enter total mark(s) and Mark(s) obtained in 7 subjects. then program will calculate percentage and GPA for each student based on entering total and obtained marks and will display the result.

hint on how to calculate the GPA:

1. find the sum of credits of all the subjects
2. find the sum of product of credit and the grade point for all subjects. store the result in total
3. divide total by sum of credits of all the subjects.

**Answers**

#include <stdio.h>

int main ()

{

 int yr;

 printf ("Enter a year \n");

 scanf ("%d", &yr);

 if (yr%4 == 0) {

 if(yr%100 == 0) {

 if(yr%400 == 0)

 printf("\n It is LEAP YEAR.");

 else

 printf("\n It is NOT LEAP YEAR.");

 }

 else {

 printf ("\n It is LEAP YEAR.");

 }

 }

 else

 printf("\n It is NOT LEAP YEAR.");

 return 0;

}

/\*

\* C program to find the biggest of three numbers

\*/

#include <stdio.h>

void main()

{

 int num1, num2, num3;

 printf("Enter the values of num1, num2 and num3\n");

 scanf("%d %d %d", &num1, &num2, &num3);

 printf("num1 = %d\tnum2 = %d\tnum3 = %d\n", num1, num2, num3);

 if (num1 > num2)

 {

 if (num1 > num3)

 {

 printf("num1 is the greatest among three \n");

 }

 else

 {

 printf("num3 is the greatest among three \n");

 }

 }

 else if (num2 > num3)

 printf("num2 is the greatest among three \n");

 else

 printf("num3 is the greatest among three \n");

}

1. If percentage >= 90% : Grade A
If percentage >= 80% : Grade B
If percentage >= 70% : Grade C
If percentage >= 60% : Grade D
If percentage >= 40% : Grade E
If percentage <= 40% : Grade F

/\*\*

 \* C program to enter marks of seven subjects and find percentage and grade

 \*/

#include <stdio.h>

int main()

{

 int phy, chem, bio, math, comp, eng, civic;

 float per;

 /\* Input marks of seven subjects from user \*/

 printf("Enter seven subjects marks: ");

 scanf("%d%d%d%d%d%d%d", &phy, &chem, &bio, &math, &comp, &eng, &civic);

 /\* Calculate percentage \*/

 per = (phy + chem + bio + math + comp + eng + civic) / 5.0;

 printf("Percentage = %.2f\n", per);

 /\* Find grade according to the percentage \*/

 if(per >= 90)

 {

 printf("Grade A");

 }

 else if(per >= 80)

 {

 printf("Grade B");

 }

 else if(per >= 70)

 {

 printf("Grade C");

 }

 else if(per >= 60)

 {

 printf("Grade D");

 }

 else if(per >= 40)

 {

 printf("Grade E");

 }

 else

 {

 printf("Grade F");

 }

 return 0;

}