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MATRI NO: 18/sci01/082

1. **write a c program to check whether a year is leap or not**

Solution

#include <stdio.h>

int main()

{

int year;

 printf("Enter a year \n");

 scanf("%d", &year);

 if(year%4 == 0){

 if (year%100 == 100){

 if (year%400 == 0)

 printf("\n it is Leap Year. ");

 else

 printf("\n it is not a Leap year. ");

 }

` else {

 printf("\n it is a leap year. ");

 }

 }

 else

 printf("\n it is not a Leap Year ");

 return 0;

}



****

1. **write a c program to find the maximum between 3 numbers.**

Solution

#include <stdio.h>

void main()

{

 int A,B,C;

 printf(" Enter the values of A,B and C \n");

 scanf("%d %d %d", &A, &B, &C);

 printf("A= %d\tB= %d\tC = %d\n", A,B ,C);

 if (A > B)

 {

 if (A > C){

 printf("A is the maximum among the three numbers \n ");

 }

 else

 {

 printf("C is the maximum among the three numbers \n");

 }

 }

 else if (B > C)

 printf("B is the maximum among the three numbers \n");

 else

 printf("C is the maximum among the three numbers \n");

 }



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:**

**a) find the sum of credits of all the subjects**

**b) find the sum of product of credit and the grade point for all subjects. store the result in total**

**c) divide total by sum of credits of all the subjects.**

**solution**

#include<stdio.h>

int main()

{

 int English,Maths,Geography,CSC206,French,Physics,Chemistry,totalmarks,sum;

 float per;

 totalmarks=700;

 printf("Enter score for English out of 100= ");

 scanf("%d",&English);

 printf("Enter score for Maths out of 100= ");

 scanf("%d",&Maths);

 printf("Enter score for Geography out of 100= ");

 scanf("%d",&Geography);

 printf("Enter score for CSC206 out of 100= ");

 scanf("%d",&CSC206);

 printf("Enter score for French out of 100= ");

scanf("%d",&French);

 printf("Enter score for Physics out of 100= ");

 scanf("%d",&Physics);

 printf("Enter score for Chemistry out of 100= ");

 scanf("%d",&Chemistry);

 printf("Maximum Marks= %d",totalmarks);

 sum=English + Maths + Geography + CSC206 + French + Physics + Chemistry;

 printf("\nObtained marks=%d",sum);

 per=(sum\*100)/700;

 printf("\nPercentage= %0.2f",per);

 if(per>=90 && per<=100)

 {

 printf("\nGPA=5.0");

 printf("\nA+");

 }

 else if(per>=85 && per<=89)

 {

 printf("\nGPA=4.5");

 printf("\nA");

 }

 else if(per>=80 && per<=84)

 {

 printf("\nGPA=4.0");

 printf("\nB+");

 }

 else if(per>=75 && per<=79)

 {

 printf("\nGPA=3.5");

 printf("\nB");

 }

 else if(per>=70 && per<=74)

 {

 printf("\nGPA=3.0");

 printf("\nB-");

 }

 else if(per>=65 && per<=69)

 {

 printf("\nGPA=2.5");

 printf("\nC+");

 }

 else if(per>=60 && per<=64)

 {

 printf("\nGPA=2.0");

 printf("\nC-");

 }

 else if(per>=55 && per<=59)

 {

 printf("\nGPA=1.7");

 printf("\nD+");

 }

 else if(per>=45 && per<=54)

 {

 printf("\nGPA=1.3");

 printf("\nD-");

 }

 else if(per>=0 && per<=44)

 {

 printf("\nGPA=0.0");

 printf("\nF");

 }

 return 0;

 getchar();

}

