Samson Favour Dyep

18/ENG09/007

Aeronautical Engineering

Question 1

\* #include<stdio.h>

\*

\* void main()

\*

\* {

\*

\* int nodays,years, weeks,days;

\*

\* printf("Enter the total days\n");

\*

\* scanf("%d",&nodays);

\*

\* years=nodays/365;

\*

\* weeks=(nodays%365)/7;

\*

\* days=(nodays%365)%7;

\*

\* printf("%d = %d years,%d weeks,%d days\n",nodays,years,weeks,days);

\*

\* }

Question 2

#include<stdio.h>

#include<math.h>

int main()

{

 int x1,x2,y1,y2;

 int x,y; //temporary variables

 float distance;

 printf("Enter X and Y coordinates of first point");

 scanf("%d %d",&x1,&y1);

 printf("Enter X and Y coordinates of Second point");

 scanf("%d %d",&x2,&y2);

 x=x2-x1;

 y=y2-y1;

 distance=sqrt((x\*x)+(y\*y));

 printf("Distance: %.2f",distance);

 return 0;

}

Question 3

#include <stdio.h>

int main() {

 float x, y, z, P, A;

 printf("\nInput the first number: ");

 scanf("%f", &x);

 printf("\nInput the second number: ");

 scanf("%f", &y);

 printf("\nInput the third number: ");

 scanf("%f", &z);

 if(x < (y+z) && y < (x+z) && z < (y+x))

 {

 P = x+y+z;

 printf("\nPerimeter = %.1f\n", P);

 }

 else

 {

 printf("Not possible to create a triangle..!");

 }

}

/\*\*

 \* C program to check whether a triangle is valid using nested if

 \*/

#include <stdio.h>

int main()

{

 int side1, side2, side3;

 /\* Initially assume that the triangle is not valid \*/

 int valid = 0;

 /\* Input all three sides of a triangle \*/

 printf("Enter three sides of triangle: \n");

 scanf("%d%d%d", &side1, &side2, &side3);

 if((side1 + side2) > side3)

 {

 if((side2 + side3) > side1)

 {

 if((side1 + side3) > side2)

 {

 /\*

 \* If side1 + side2 > side3 and

 \* side2 + side3 > side1 and

 \* side1 + side3 > side2 then

 \* the triangle is valid. Hence set

 \* valid variable to 1.

 \*/

 valid = 1;

 }

 }

 }

 /\* Check valid flag variable \*/

 if(valid == 1)

 {

 printf("Triangle is valid.");

 }

 else

 {

 printf("Triangle is not valid.");

 }

 return 0;

}

Question 4

#include <stdio.h>

int main()

{

 int age;

 int cnt\_baby=0,cnt\_school=0,cnt\_adult=0;

 int count=0;

 while(count<15)

 {

 printf("Enter age of person [%d]: ",count+1);

 scanf("%d",&age);

 if(age>=0 && age<=5)

 cnt\_baby++;

 else if(age>=6 && age<=17)

 cnt\_school++;

 else

 cnt\_adult++;

 //increase counter

 count++;

 }

 printf("Baby age: %d\n",cnt\_baby);

 printf("School age: %d\n",cnt\_school);

 printf("Adult age: %d\n",cnt\_adult);

 return 0;

}

Question 5

//included essential header files

#include <iostream>

#include <stdlib.h>

//namespace inclusion

using namespace std;

//main function

int main()

{

    //variable declarion of int type

    int userGuess, randomNumber;

    //calculated randomNumber

    randomNumber=(rand()%100)+1;

    //do while loop

    do{

        //diplay message to user

        cout<<"Enter your guess:";

        //input value from user

        cin>>userGuess;

        //if user guess is higher than the random number

        if(userGuess>randomNumber)

        //print result

  &nb...