NWANKWO CHUKWUERIKE BIOMEDICAL ENGINEERING 17/MHS01/205

**1)**

#include <stdio.h>

int main()

{

 int days, years, weeks;

 days = 1343;

 // Converts days to years, weeks and days

 years = days/365;

 weeks = (days % 365)/7;

 days = days- ((years\*365) + (weeks\*7));

 printf("Years: %d\n", years);

 printf("Weeks: %d\n", weeks);

 printf("Days: %d \n", days);

 return 0;

}

**2)**

#include <stdio.h>

#include <math.h>

int main() {

 float x1, y1, x2, y2, gdistance;

 printf("Input x1: ");

 scanf("%f", &x1);

 printf("Input y1: ");

 scanf("%f", &y1);

 printf("Input x2: ");

 scanf("%f", &x2);

 printf("Input y2: ");

 scanf("%f", &y2);

 gdistance = ((x2-x1)\*(x2-x1))+((y2-y1)\*(y2-y1));

 printf("Distance between the said points: %.4f", sqrt(gdistance));

 printf("\n");

 return 0;

}

**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..!");

 }

}

**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<=4)

 cnt\_baby++;

 else if(age>=5 && 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;

}

**5)**

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

int main()

{

 int random\_genNo=0,count=0,num;

 int stime;

 long ltime;

 //initialise srand with current time, to get random number on every run

 ltime = time(NULL);

 stime = (unsigned) ltime/2;

 srand(stime);

 //generate random number

 random\_genNo=rand()%1000;

 //run infinite loop

 while(1)

 {

 //increase counter

 count+=1;

 //read number from user

 printf("\n\nGuess a number from (0 to 1000): ");

 scanf("%d",&num);

 //compare entered number with generated number

 if(random\_genNo==num){

 printf("Congratulations, you have guessed a correct number.");

 break;

 }

 else if(random\_genNo<num){

 printf("Generated number is less than entered number, try your luck again...");

 }

 else if(random\_genNo>num){

 printf("Generated number is greater than entered number, try your luck again...");

 }

 if(count==7){

 printf("\n\n### Maximum limit of atttempt finished, BAD LUCK !!!\n");

 break;

 }

 }

 return 0;

}