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;

}