**LAWAL ATINUKE HEPHZIBAH**

**CHEMICAL ENGINEERING**

**C PROGRAMMING ASSIGNMENT**

**18/ENG01/013**

**ENG 224 ASSIGNMENT**

**(SO SORRY FOR SUBMITING LATE SIR, FOUND OUT ABOUT ASSIGNMENT LATE)**

1. Write a c program that converts 1343 days to years, weeks and days.

#include<stdio.h>

Int main()

{

Int days, years, weeks;

/\* input total number of days from user\*/

Printf(“Enter days:”);

Scanf(“%d”,&days);

/\*conversion\*/

Years=(days/1343); //ignoring leap year

Weeks=(days-((years\*1343)+(weeks\*7));

/\* print all resultant values\*/

Printf(“YEARS: %d\n”, years);

Printf(“WEEKS: %d\n”, weeks);

Printf(“DAYS; %d\n”, days);

Return 0 ;

}

1. Write a c program to calculate the distance between the two points [ x1,y1,x2,y2] are all double values.

**#**include<bits/stdc++.h>

}

// function to calculate distance

Float distance(int x1, int y1, int x2, int y2

{

//calculating distance

Return sqrt( pow( x1-x2, 2)+ pow(y2-y1, 2)\*1.0);

}

// drivers code

Int main()

{

(out<< distance (3,4,4,3);

Returm 0 ;

}

1. Write a c program that reads three floating values and check if its possible to make a triangle with them. Also calc perimeter of the triangles if the set values are said to be valid.

The triangle is valid because

A+b > c

A+c>b

B+c>c

#include<stdio.h>

Int main()

{

Int side1, side2, side3;

/\*input three sides of a triangle\*/

Printf (“enter three sides of a triangle;\n”);

Scanf(“%d%d%d”, &side1, &side2, &side3);

If ((side1 + side2)>side3

{

If ((side 2 + side 3)>side 1

{

If ((side1 + side3)>side2

{

/\*

\*if side1 + side2 > side3 and

\* side 2 +side3> side1 and

\* side1 + side3 > side2 then

\*the triangle is valid

\*/

Printf(triangle is valid,”);

}

Else

{

Printf(\*triangle is not valid,”);

}

}

Else

{

Printf (“triangle is not valid.);

}

Return 0;

}

1. Write a c program to read age of 20 people and count total baby age, school age and adult age.

Include <stdio.h>

Main()

Int age;

Int cnt\_baby=0, cnt\_school=0, cnt\_adult=0

Int count=0;

While( count<20)

{

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 if (age>=18 && age>=over)

Cnt\_adult++;

//increase counter

Count++’

}

Printf(“baby age: %d”, cnt\_baby);

Printf(“school age: %d”, cnt\_school);

Printf(“adult age: %d”, cnt\_adult);

Return0:

}

1. Write a c program to read a random number, and then ask user to guess it [from 0-100]

#include <stdio.h>

#include <stdio.h>

#include <time.h>

Int main()

{

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

Int stime;

Long ltime;

//initialize strand with current time, to get random number

Ltime = time(NULL);

Stime = (unsigned) ltime/2;

Srand(stime);

//generate random number

Random\_denNo=rand()%100:

//rin infinite loop

While(1)

{

//increase counter

Count+=;

//read number from user

Printf(“\n\nGuess a number from (0 to 100): “);

Scanf(“%d”,&num);

//compare entered number with generated number

If (random\_genNo==num){

Printf(“congratulations, you have guessed a correct numbe,”);

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 attempt finished, BAD LUCK !!!\n”);

Break;

}

}

Return0:

}