**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:

}