C programming Assignment

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**1) To convert 1343 to years, weeks and days**.

 include <stdio.h>

int main()

{

int days, years, weeks;

days = 1329;

// 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) Distance between two points**

#include<stdio.h>

#include<math.h>

int main()

{

 int x1, y1, x2, y2, x, y, distance;

 // take first point's coordinates

 printf("Enter coordinates of first point: ");

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

 // take second point's coordinates

 printf("Enter coordinates of second point: ");

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

 x = (x2-x1);

 y = (y2-y1);

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

 // display result

 printf("Distance = %d", distance);

 return 0;

**3) to read floating values and determine if its possible to make a triangle also calculating the perimeter of the triangle**

#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) to read the age of 20 people and count total baby age, school age and adult age.**

#include <stdio.h>

{

 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 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 o;

**5) to read random numbers and ask a user to guess it from 0-100**

# #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;

# }