

OLAYINKA BABTUNDE

CIVIL ENGINEERING

18/ENG03/047

1. C Program to convert 1343 days into years, weeks and days.

```
#include <stdio.h>
```

```
int main()
```

```
{
```

```
    int NoOfDays, years, weeks, days;
```

```
    printf("\n Please Enter the Number of days : ");
```

```
    scanf("%d", &NoOfDays);
```

```
    years = NoOfDays / 365;
```

```
    weeks = (NoOfDays % 365) / 7;
```

```
    days = (NoOfDays % 365) % 7;
```

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

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

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

```
return 0;
```

```
Please Enter the Number of days : 1343
```

```
Years = 3
```

```
Weeks = 35
```

```
Days = 3
```

1. C Program to calculate the distance between double values, x1,x2,y1,y2.

```
#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;

}

```

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE
Windows PowerShell
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PS C:\ProgramC> cd "c:\ProgramC\.vscode\" ; if ($?) { gcc number2.c -o number2 } ; if ($?) { .\number2 }
Input x1: 6
Input y1: 4
Input x2: 3
Input y2: 1
Distance between the said points: 4.2426
PS C:\ProgramC\.vscode> 

```

2. C program that reads three floating values, making a triangle with them and also the perimeter .of such triangle

```

#include <stdio.h>

int main ()

{

float a,b,c;

printf("Enter length a: ");

```

```

scanf("%f",&a);

printf("Enter length b: ");

scanf("%f",&b);

printf("Enter length c: ");

scanf("%f",&c);

if ((a+b)>c&&(a+c)>b&&(b+c)>a)

{

    printf("%f,%f,and %f form a triangle of perimeter: %f",a,b,c,(a+b+c));

}

else {

    printf("invalid lengths");

}

}

```

```

PS C:\ProgramC> cd "C:\ProgramC\" ; if ($?) { gcc number3sol.c -o number3sol } ; if ($?) { .\number3sol }
Enter length a: 10
Enter length b: 5
Enter length c: 13
10.000000,5.000000,and 13.000000 form a triangle of perimeter: 28.000000
PS C:\ProgramC>

```

3. C program to read age of 20 people, counting total baby age, school age and adult age.

```

#include <stdio.h>
int 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 {
            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);
}

```

```

Enter age of person [14]: 12
Enter age of person [15]: 2
Enter age of person [16]: 1
Enter age of person [17]: 0
Enter age of person [18]: 3
Enter age of person [19]: 7
Enter age of person [20]: 1
Baby age: 6
School age: 6
Adult age: 8

```

4. C program to read a random number asking the user to guess from 0 to 100, generated randomly giving the user 7 attempts indicating when they are at a high or low.

```

#include <stdio.h>
void guess()
{
    int r, attempt=7,guess;
    srand(time(NULL));
    r=rand()%101;
    while(attempt !=0)
    {
        printf("Enter your guess:")
        scanf("%d",&guess);
        if (guess ==r) {
            printf("You guessed correctly!");
            attempt=0
        }
        else
        if (guess <r) {
            printf("Guess too low. Guess again![%d]");
        }
        if (guess >r) {
            printf("Guess too high. Guess again![%d]");
        }
        count++;
    }
}

```

```
return 0;  
}
```