

LAW - ADUE EMMANUEL

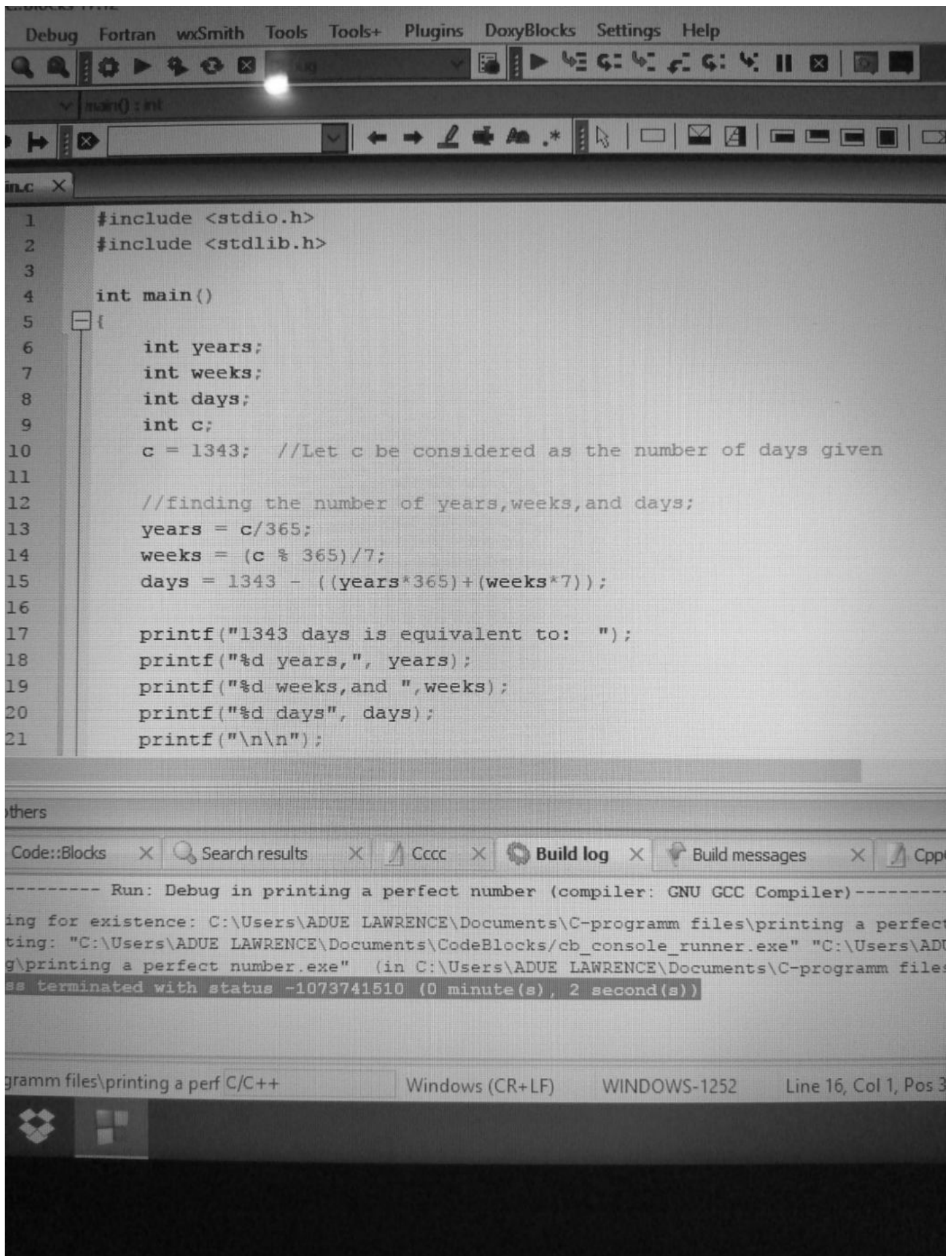
19/ENG05/069

MECHATRONICS

26th April, 2020

[This project was presented in this manner
clarity enhancement]

QUESTION ONE (1)



main.c [printing a perfect number] - Code::Blocks 17.12

File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyE

"C:\Users\ADUE LAWRENCE\Documents\C-programm files\printing a perfect number\bin\Deb

<global> 1343 days is equivalent to: 3 years,35 weeks,and 3 days

Process returned 0 (0x0) execution time : 0.016 s

Press any key to continue.

Re

{ }

Code::Blocks Search results Cccc

Run: Debug in printing a perfect number
C:\Users\ADUE LAWRENCE\Documen

$\overline{HPSG} = V$; $HGO =$

QUESTION TWO (2)

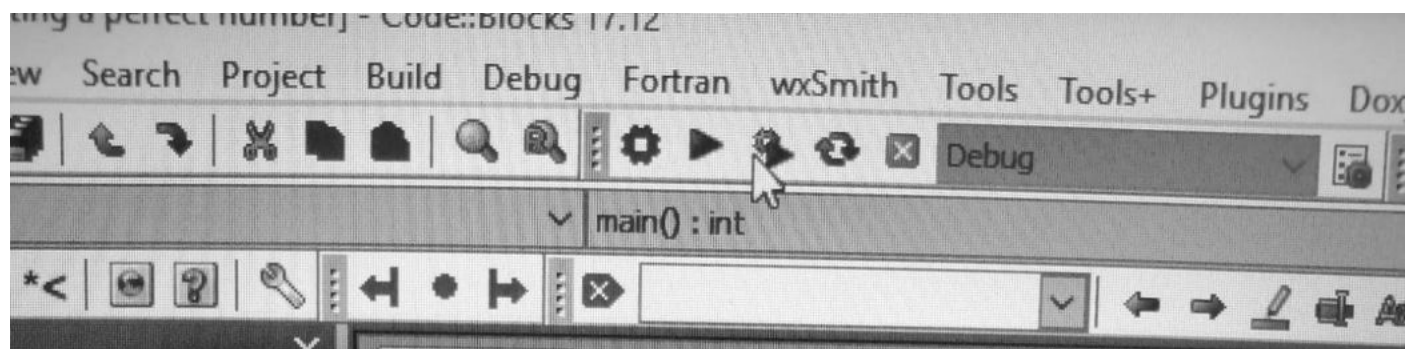
```
main() : int
[
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      double x1,x2,y1,y2;
7      double distance;
8      printf("x1:");
9      scanf("%lf",&x1);
10     printf("x2:");
11     scanf("%lf",&x2);
12     printf("y1:");
13     scanf("%lf",&y1);
14     printf("y2:");
15     scanf("%lf",&y2);
16     distance =sqrt(((x1-x2)*(x1-x2))+((y1-y2)*(y1-y2)));
17     printf("the distance between the points is %lf",distance);
18 }
19
20
```

& others
Code::Blocks x Search results x Cccc x Build log x Build messages x CppC

Line	Message
	=== Build: Debug in printing a perfect number (compiler: GNU GCC Co
	In function 'main':
16	warning: implicit declaration of function 'sqrt' [-Wimplicit-functi
16	warning: incompatible implicit declaration of built-in function 'sq
16	note: include '<math.h>' or provide a declaration of 'sqrt'

programm files\printing a perf C/C++ Windows (CR+LF) WINDOWS-1252 Line 11, Col 22, Pos 18



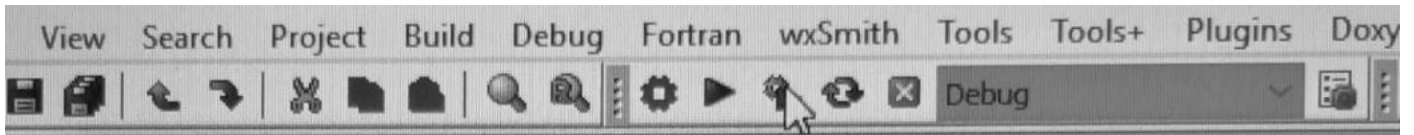


```
"C:\Users\ADUE LAWRENCE\Documents\C-programm files\printing a perfect n
x1:5
x2:3
y1:7
y2:4
the distance between the points is 3.605551
Process returned 0 (0x0)   execution time : 8.030 s
Press any key to continue.
```

Checking for existence: C:\Users\ADUE LAWRENCE\Documents\C-
Executing: "C:\Users\ADUE LAWRENCE\Documents\CodeBlocks\cb_
\Debug\printing a perfect number.exe" (in C:\Users\ADUE LA
in the active project

QUESTION THREE (3)


```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      float x,y,z;
7      float perimeter;
8      printf("Input first side: ");
9      scanf("%f",&x);
10     printf("input second side: ");
11     scanf("%f",&y);
12     printf("input third side: ");
13     scanf("%f",&z);
14     perimeter = x + y + z;
15     if((x + y) > z)
16     {
17         if ((x + z) > y)
18         {
19             if((y + z) > x)
20             {
21                 printf("These values can be used to form a triangle");
22                 printf("\nPerimeter = %f", perimeter);
23                 printf("\n");
24             }
25             else
26             {
27                 printf("These values cannot be used to form a triangle");
28             }
29         }
30         else
31         {
32             printf("These values cannot be used to form a triangle");
33         }
34     }
35     else
36     {
```



"C:\Users\ADUE LAWRENCE\Documents\C-programm files\printing a perfect number\bi

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```
Input first side: 5  
input second side: 1  
input third side: 8  
These values cannot be used to form a triangle  
Process returned 0 (0x0)   execution time : 7.551 s  
Press any key to continue.
```

```
----- Run: Debug in printing a perfect number  
Checking for existence: C:\Users\ADUE LAWRENCE\Documen  
Executing: "C:\Users\ADUE LAWRENCE\Documents\CodeBlock  
\Debug\printing a perfect number.exe" (in C:\Users\AD
```

Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins D

"C:\Users\ADUE LAWRENCE\Documents\C-programm files\printing a perfect number\bin\

```
Input first side: 4
input second side: 5
input third side: 7
These values can be used to form a triangle
Perimeter = 16.000000
```

```
Process returned 0 (0x0)   execution time : 12.939 s
Press any key to continue.
```

Code::Blocks Search results Cccc

```
----- Run: Debug in printing a perfect numb
Checking for existence: C:\Users\ADUE LAWRENCE\Docum
Executing: "C:\Users\ADUE LAWRENCE\Documents\CodeBlo
\Debug\printing a perfect number.exe" (in C:\Users\
```

and run the active project

NUMBER FOUR (4)

main.c X main.c X

```
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  int main()
5  {
6      int age;
7      int baby=0;
8      int attending_school=0;
9      int adult_life=0;
10     int p=0;          //let p be considered as the number of people
11
12     while(p<20)
13     {
14         printf("Enter age of the person [%d]:",p+1);
15         scanf("%d", &age);
16         if(age>=0 && age<=4)
17             baby++;
18         else if(age>=5 && age<=17)
19             attending_school++;
20         else
21             adult_life++;
22         p++;
23     }
24     printf("TOTAL BABY AGE: %d\n",baby);
25     printf("NUMBER OF PEOPLE ATTENDING SCHOOL: %d\n", attending_school);
26     printf("NUMBER OF ADULTS: %d\n", adult_life);
27 }
28
```



main.c [Emmanuel Law-Adue_Mechatronics//] - Code::Blocks 17.12

Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DoxyBl

main.c X main.c X

```
1  
2  
3 Enter age of the person [1]:3  
4 Enter age of the person [2]:4  
5 Enter age of the person [3]:12  
6 Enter age of the person [4]:8  
7 Enter age of the person [5]:18  
8 Enter age of the person [6]:20  
9 Enter age of the person [7]:2  
10 Enter age of the person [8]:17  
11 Enter age of the person [9]:2  
12 Enter age of the person [10]:2  
13 Enter age of the person [11]:2  
14 Enter age of the person [12]:19  
15 Enter age of the person [13]:15  
16 Enter age of the person [14]:15  
17 Enter age of the person [15]:14  
18 Enter age of the person [16]:0  
19 Enter age of the person [17]:5  
20 Enter age of the person [18]:5  
21 Enter age of the person [19]:18  
22 Enter age of the person [20]:12  
23 TOTAL BABY AGE: 7  
24 NUMBER OF PEOPLE ATTENDING SCHOOL: 9  
25 NUMBER OF ADULTS: 4  
26  
27 Process returned 0 (0x0) execution time : 38.805 s  
28 Press any key to continue.  
-
```

C:\Users\ADUE LAWRENCE\Documents\C-programm files\.cbp\Emmanu C/C++

Windows (CR+LF)



NUMBER FIVE

main.c X

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <time.h>
4
5  int main()
6  {
7      int random_number = 0;
8      int trials = 0;
9      int guessed_number;
10     int stime;
11     long ltime;
12     ltime = time(NULL);
13     stime = (unsigned) ltime/3;
14     srand(time);
15     random_number = rand()%100;
16     while(1)
17     {
18         trials=trials+1;
19         printf("Guess any number from 0 to 100:      ");
20         scanf("%d",&guessed_number);
21
22         if(random_number==guessed_number)
23         {
24             printf("You guessed the correct number");
25         }
26         else
27         {
28             printf("The number you guessed is incorrect\n\n");
29         }
30         if(trials==7)
31         {
32             printf("Maximum number of trials reached, try again later");
33             break;
34         }
35     }
36 }
```

C:\Users\ADUE LAWRENCE\Documents\C-programm files\Emmanuel La\C/C++

Windows (CR+LF)

WINDOWS-1252

Line 33, Col 19



[Emmanuel Law-Adue_Mechatronics] - Code::Blocks 17.12

View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins

Debug

"C:\Users\ADUE LAWRENCE\Documents\C-programm files\Emmanuel Law-Adue_

```
Guess any number from 0 to 100:      8
```

```
The number you guessed is incorrect
```

```
Guess any number from 0 to 100:     50
```

```
The number you guessed is incorrect
```

```
Guess any number from 0 to 100:     37
```

```
The number you guessed is incorrect
```

```
Guess any number from 0 to 100:     14
```

```
The number you guessed is incorrect
```

```
Guess any number from 0 to 100:     69
```

```
The number you guessed is incorrect
```

```
Guess any number from 0 to 100:     37
```

```
The number you guessed is incorrect
```

```
Guess any number from 0 to 100:     56
```

```
The number you guessed is incorrect
```

```
Maximum number of trials reached, try again later
```

```
Process returned 0 (0x0)   execution time : 20.618 s
```

```
Press any key to continue.
```

```
----- Run: Debug in Emmanuel Law-Adue_Mechat  
Checking for existence: C:\Users\ADUE LAWRENCE\Document  
Executing: "C:\Users\ADUE LAWRENCE\Documents\CodeBlocks  
bin\Debug\Emmanuel Law-Adue_Mechatronics.exe" (in C:
```

C/C++

Windows (CR+LF)