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MATRIC NO: 18/ENG05/003

DEPT: MECHATRONICS

COURSE CODE: ENG 224

COURSE TITLE: STRUCTURED COMPUTER
PROGRAMMING

ASSIGNMENT

no 1.c [eng 224 codes] - Code::Blocks 17.12

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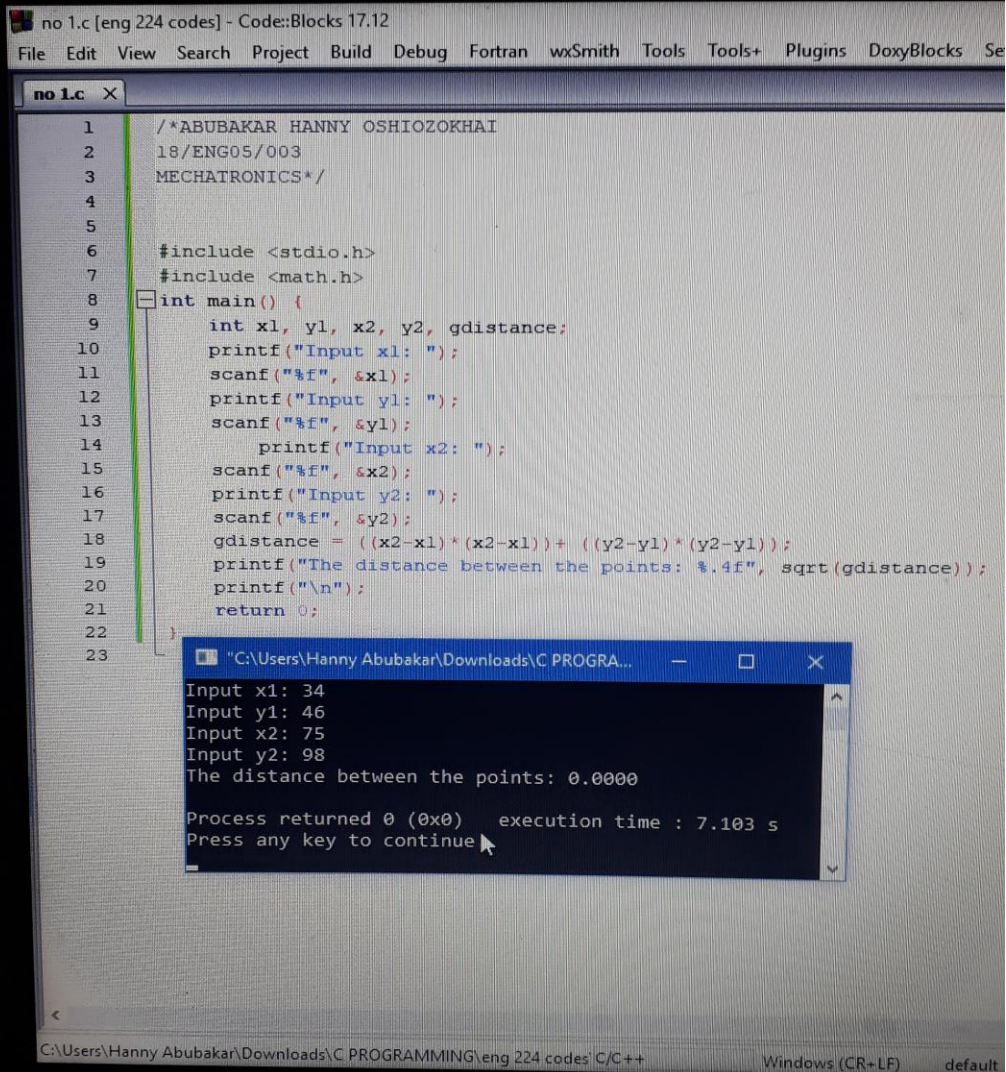
no 1.c X

```
1  /*ABUBAKAR HANNY OSHIOZOKHAI
2  18/ENG05/003
3  MECHATRONICS*/
4  #include <stdio.h>
5  int main()
6  {
7      int days, years, weeks;
8      days = 1343;
9
10     years = days/365;
11     weeks = (days % 365)/7;
12     days = days - ((years*365) + (weeks*7));
13
14     printf("Years: %d\n", years);
15     printf("Weeks: %d\n", weeks);
16     printf("Days: %d \n", days);
17     return 0;
18 }
19
20
```

"C:\Users\Hanny Abubakar\Downloads\C PROGR...

Years: 3
Weeks: 35
Days: 3

Process returned 0 (0x0) execution time : 0.098 s
Press any key to continue.



The image shows a screenshot of a C code editor window titled "no 1.c [eng 224 codes] - Code::Blocks 17.12". The editor contains a C program that calculates the distance between two points. The code is as follows:

```
1  /*ABUBAKAR HANNY OSHIOZOKHAI
2  18/ENG05/003
3  MECHATRONICS*/
4
5
6  #include <stdio.h>
7  #include <math.h>
8  int main() {
9      int x1, y1, x2, y2, gdistance;
10     printf("Input x1: ");
11     scanf("%f", &x1);
12     printf("Input y1: ");
13     scanf("%f", &y1);
14     printf("Input x2: ");
15     scanf("%f", &x2);
16     printf("Input y2: ");
17     scanf("%f", &y2);
18     gdistance = ((x2-x1)*(x2-x1)) + ((y2-y1)*(y2-y1));
19     printf("The distance between the points: %.4f", sqrt(gdistance));
20     printf("\n");
21     return 0;
22 }
23
```

Below the code editor, a console window titled "C:\Users\Hanny Abubakar\Downloads\C PROGRA..." displays the program's execution. The output is as follows:

```
Input x1: 34
Input y1: 46
Input x2: 75
Input y2: 98
The distance between the points: 0.0000

Process returned 0 (0x0)   execution time : 7.103 s
Press any key to continue
```

The status bar at the bottom of the window shows the file path "C:\Users\Hanny Abubakar\Downloads\C PROGRAMMING\eng 224 codes\ C/C++", the window title "Windows (CR+LF)", and the editor theme "default".

no 1.c [eng 224 codes] - Code::Blocks 17.12
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```
no 1.c X
1  /*ABUBAKAR HANNY OSHIOZOKHAI
2  18/ENG05/003
3  MECHATRONICS*/
4
5
6  #include <stdio.h>
7  int main() {
8      int x, y, z, P, A;
9      printf("\nInput first number: ");
10     scanf("%f", &x);
11     printf("\nInput second number: ");
12     scanf("%f", &y);
13     printf("\nInput third number: ");
14     scanf("%f", &z);
15
16     if(x < (y+z) && y < (x+z) && z < (y+x))
17     {
18         P = x+y+z;
19         printf("\nPerimeter = %.1f\n", P);
20     }
21     else
22     {
23         printf("Triangle cannot be created..!");
24     }
25 }
26
```

```
"C:\Users\Hanny Abubakar\Downloads\C PROGRAMMIN...
Input first number: 5
Input second number: 7
Input third number: 3
Triangle cannot be created..!
Process returned 0 (0x0)   execution time : 4.946 s
Press any key to continue.
```

no 1.c [eng 224 codes] - Code::Blocks 17.12

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1.c x

```
1  /*ABUBAKAR HANNY OSHIOZOKHAI
2  18/ENG05/003
3  MECHATRONICS*/
4
5
6  #include <stdio.h>
7  int main()
8  {
9      int age;
10     int num_baby=0,num_school=0,num_adult=0;
11     int count=0;
12     while(count<20)
13     {
14         printf("Input age of the person [%d]: ",count+1);
15         scanf("%d",&age);
16         If(age>=0 && age<=4)
17         {
18             num_baby++;
19         }
20         else if(age>=5 && age<=17)
21         {
22             num_school++;
23         }
24         else
25         {
26             num_adult++;
27         }
28
29         count++;
30     }
31     printf("Baby age: %d\n",count_baby);
32     printf("School age: %d\n",count_school);
33     printf("Adult age: %d\n",count_adult);
34     return 0;
35 }
36
```

J:\Users\Hanny Abubakar\Downloads\C PROGRAMMING\eng 224 codes\C/C++

Windows (CR+LF)


```
*no 1.c X
1  /*ABUBAKAR HANNY OSHIOZORHAI
2  18/ENG05/003
3  MECHATRONICS*/
4
5  #include <stdio.h>
6  #include <stdlib.h>
7  #include <time.h>
8  int main()
9  {
10     int random_genNo=0,count=0,num;
11     int stime;
12     long ltime;
13
14     ltime = time(NULL);
15     stime = (unsigned) ltime/2;
16     srand(stime);
17
18     random_genNo=rand()%1000;
19
20     while(1)
21     {
22         count++;
23
24         printf("\n\nGuess a number from (0 to 1000): ");
25         scanf("%d",&num);
26
27         if(random_genNo==num){
28             printf("You guessed a correct number.");
29             break;
30         }
31         else if(random_genNo<num){
32             printf("The generated number is less than the number you entered, try again...");
33         }
34         else if(random_genNo>num){
35             printf("The generated number is greater than entered number, try again...");
36         }
37         if(count==7){
38             printf("\n\n### You have reached the limit, sorry ! \n");
```

```
C:\Users\Hanny Abubakar\Downloads\C PROGRAMMING\eng 224 codes\bin\...
Guess a number from (0 to 1000): 45
The generated number is greater than entered number, try again...

Guess a number from (0 to 1000): 4
The generated number is greater than entered number, try again...

Guess a number from (0 to 1000): 34
The generated number is greater than entered number, try again...

Guess a number from (0 to 1000): 6
The generated number is greater than entered number, try again...

Guess a number from (0 to 1000): 465
The generated number is less than the number you entered, try again...

Guess a number from (0 to 1000): 6
The generated number is greater than entered number, try again...

Guess a number from (0 to 1000): 5
The generated number is greater than entered number, try again...

### You have reached the limit, sorry !

Process returned 0 (0x0)   execution time : 13.981 s
Press any key to continue.
```