

Cabrera_Pablo_Cop1334C_Hw1

Chapter 02

Duplicate figures:

- 2.1

// A simple C++ program

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    cout << "Programming is great fun!";
```

```
    return 0;
```

```
}
```

A screenshot of a Windows command prompt window. The title bar shows the file path: "C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe". The window content displays the output of the program: "Programming is great fun!". Below this, it shows "Process returned 0 (0x0)" and "execution time : 0.028 s". At the bottom, it says "Press any key to continue." and there is a small cursor icon.

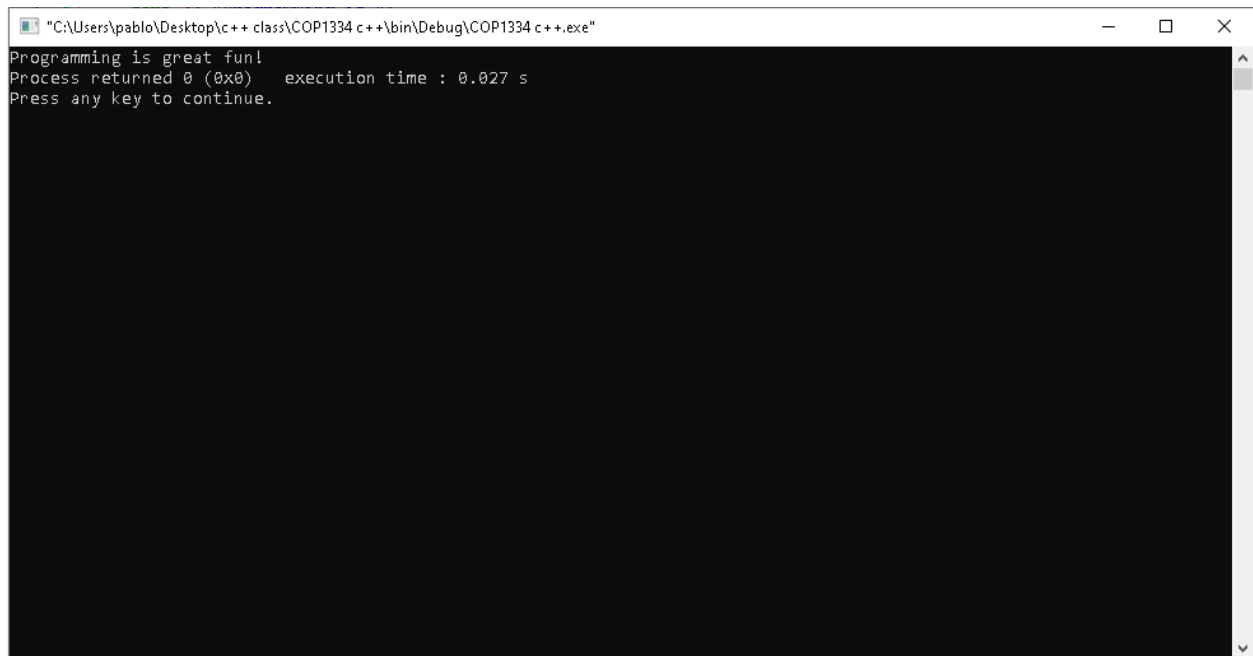
- 2.3

// A simple C++ program

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
{
    cout << "Programming is ";
    cout << "great fun!";
    return 0;
}
```



```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"
Programming is great fun!
Process returned 0 (0x0)   execution time : 0.027 s
Press any key to continue.
```

- **2.4**

// An unruly printing program

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
{
    cout << "The following items were top sellers";
    cout << "during the month of June";
    cout << "Computer games";
}
```

```

    cout << "Coffee";

    cout << "Aspirin";

    return 0;

}

```



```

"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"
The following items were top sellersduring the month of JuneComputer gamesCoffeeAspirin
Process returned 0 (0x0)   execution time : 0.027 s
Press any key to continue.

```

- **2.5**

// An unruly printing program

```
#include <iostream>
```

```
using namespace std;
```

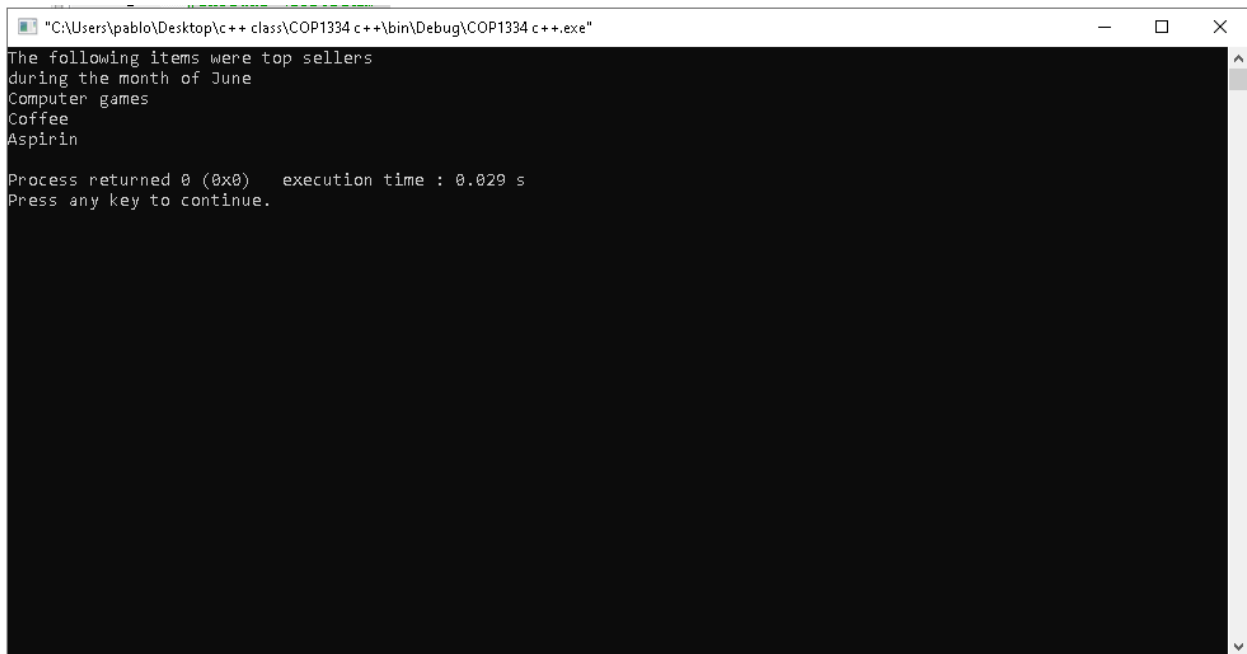
```
int main()
```

```

{
    cout << "The following items were top sellers" << endl;
    cout << "during the month of June" << endl;
    cout << "Computer games" << endl;
    cout << "Coffee" << endl;
    cout << "Aspirin" << endl;
    return 0;
}

```

}



A screenshot of a Windows command prompt window. The title bar shows the file path: "C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe". The window has standard Windows window controls (minimize, maximize, close). The command prompt displays the following text: "The following items were top sellers during the month of June", followed by a list: "Computer games", "Coffee", and "Aspirin". Below the list, it says "Process returned 0 (0x0) execution time : 0.029 s" and "Press any key to continue.".

```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"
The following items were top sellers
during the month of June
Computer games
Coffee
Aspirin

Process returned 0 (0x0)   execution time : 0.029 s
Press any key to continue.
```

- **2.7**

// This program has a variable

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

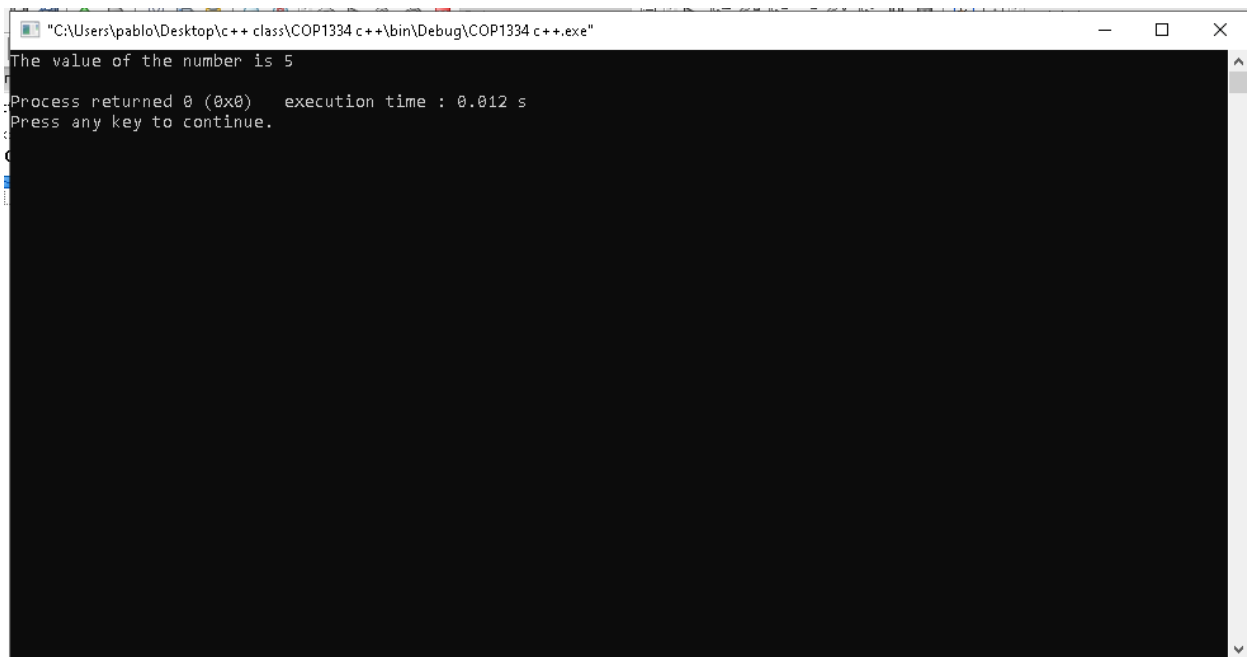
```
    int number;
```

```
    number = 5;
```

```
    cout << "The value of the number is " << number << endl;
```

```
    return 0;
```

```
}
```



```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"
The value of the number is 5
Process returned 0 (0x0)   execution time : 0.012 s
Press any key to continue.
```

- **2.13**

// This program demonstrates the close relationship between

// characters and integers

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    char letter;
```

```
    letter = 65;
```

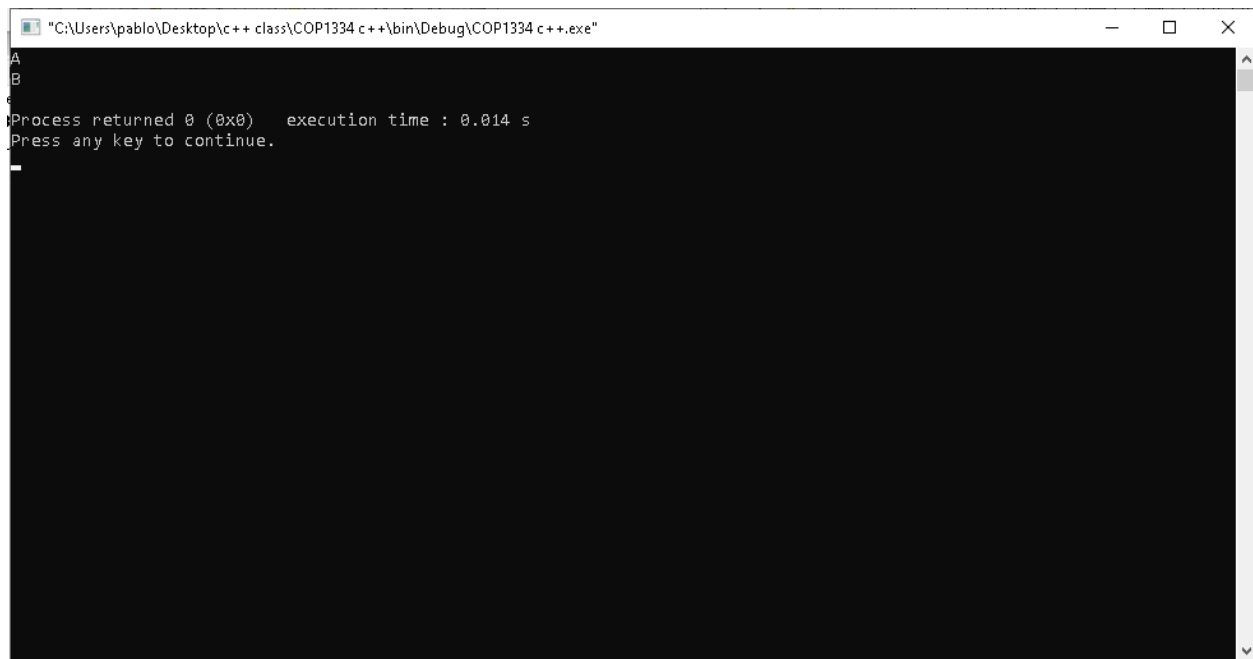
```
    cout << letter << endl;
```

```
    letter = 66;
```

```
    cout << letter << endl;
```

```
    return 0;
```

```
}
```



```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"
A
B
C
Process returned 0 (0x0) execution time : 0.014 s
Press any key to continue.
```

Solve problems:

2.9

#include <iostream>

using namespace std;

int main()

{

cout << endl;

cout << "A char uses " << sizeof(char) << " byte." << endl;

cout << "An int uses " << sizeof(int) << " bytes. " << endl;

cout << "A float uses " << sizeof(float) << " bytes. " << endl;

cout << "A double uses " << sizeof(double) << " bytes. " << endl;

cout << endl;

return 0;

}

```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\main.exe"

A char uses 1 byte.
An int uses 4 bytes.
A float uses 4 bytes.
A double uses 8 bytes.

Process returned 0 (0x0)   execution time : 0.032 s
Press any key to continue.
```

2.12

```
#include <iostream>

using namespace std;

int main()
{
    double acre, land, totalLand;
    acre = 43560;
    land = 391876;
    totalLand = land / acre;

    cout << "Your land has this many acres: " << totalLand << "." << endl;
    return 0;
}
```

```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\main.exe"

Your land has this many acres: 8.99624.

Process returned 0 (0x0)   execution time : 0.026 s
Press any key to continue.
█
```

This is 2.13

// \$14.95 the company makes 35% profit.

#include <iostream>

using namespace std;

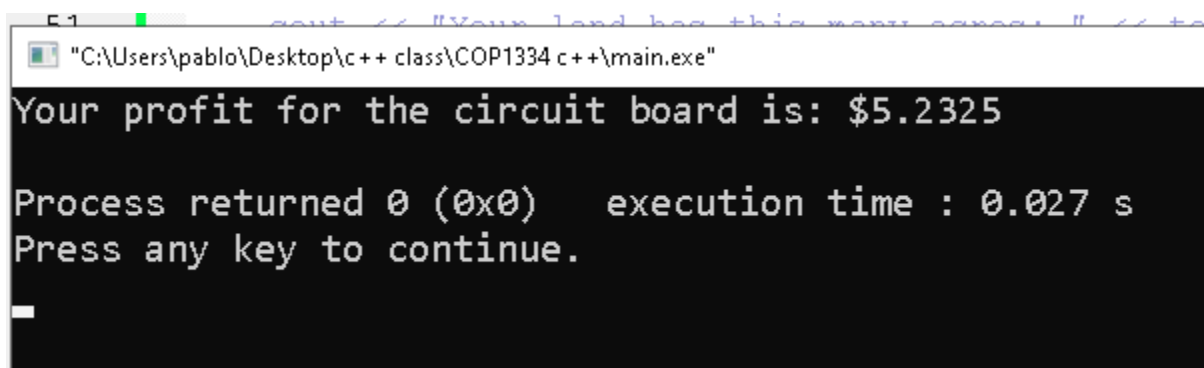
int main()

{

cout << "Your profit for the circuit board is: \$" << 14.95 * 0.35 << endl;

return 0;

}

A screenshot of a Windows command prompt window. The title bar shows the file path "C:\Users\pablo\Desktop\c++ class\COP1334 c++\main.exe". The command prompt displays the output of the program: "Your profit for the circuit board is: \$5.2325". Below this, it shows "Process returned 0 (0x0) execution time : 0.027 s" and "Press any key to continue." with a cursor on a new line.

```
C:\Users\pablo\Desktop\c++ class\COP1334 c++\main.exe
Your profit for the circuit board is: $5.2325
Process returned 0 (0x0) execution time : 0.027 s
Press any key to continue.
```

2.15

#include <iostream>

using namespace std;

int main()

{

cout << " * " << endl;

cout << " * " << endl;**

cout << " *** " << endl;**

cout << "***" << endl;**

return 0;

}


```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"

*
***
*****
*****

Process returned 0 (0x0)   execution time : 0.071 s
Press any key to continue.
```

2.17

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    double stock = 750 * 35;
```

```
    double commission = stock * 2 / 100;
```

```
    double total = stock + commission;
```

```
    cout << "The stock amount is: " << stock << ", The commission paid is: " <<
commission << ", so the total amount is: " << total << endl;
```

```
    return 0;
```

```
}
```

```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"

The stock amount is: 26250, The commission paid is: 525, so the total amount is: 26775

Process returned 0 (0x0)   execution time : 0.029 s
Press any key to continue.
```

problem 2.19

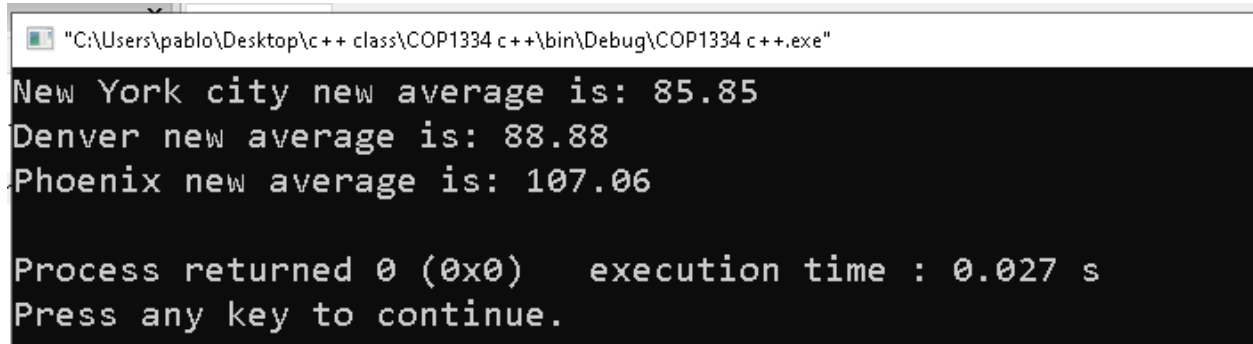
```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
double NYC, Denver, Phoenix;  
NYC = 85;  
Denver = 88;  
Phoenix = 106;  
  
cout << "New York city new average is: " << (NYC*1.02+NYC)/2 << endl;  
cout << "Denver new average is: " << (Denver*1.02+Denver)/2 << endl;  
cout << "Phoenix new average is: " << (Phoenix*1.02+Phoenix)/2 << endl;  
return 0;  
}
```



```
"C:\Users\pablo\Desktop\c++ class\COP1334 c++\bin\Debug\COP1334 c++.exe"  
New York city new average is: 85.85  
Denver new average is: 88.88  
Phoenix new average is: 107.06  
  
Process returned 0 (0x0)   execution time : 0.027 s  
Press any key to continue.
```