

24. Using the program segment in Exercise #22, identify line number(s) in which each of the following can be found:
- method invocation
  - `namespace`
  - `class` name
  - argument to a method
  - identifier
25. Identify the syntax error(s) (if any) in the following:

```

Line 1  using System
Line 2  namespace ExerciseI
Line 3  {
Line 4      Problem2
Line 5      {
Line 6          static Main( )
Line 7          {
Line 8              console.write("ok")
Line 9          }
Line 10     }
Line 11 }
```

## PROGRAMMING EXERCISES

- Write a program that displays the traditional Hello World message on the screen but adds your introduction. The output should be displayed with white background and black text. One possible design is shown here.

```
Hello World! My name is Tyler Howard!
```

For an added challenge, also display your message using a different language.

For example, using Spanish, the message might read:

```
In Spanish:
Hello World! Mi nombre es Tyler Howard!
```

- Develop an application that produces a banner containing information about your project. Items you might include are your programming assignment number, name, date submitted, and the purpose of the

application. Label each item. These are items you might want to include as internal documentation on future programming assignments. The output should be displayed with white background and black text. Your output for your banner might look similar to the following:

```
*****
**      Programming Assignment #2      **
**      Developer: Alma King           **
**      Date Submitted: September 17   **
**      Purpose: Provide internal documentation. **
*****
```

In addition to printing the output screen banner shown in the preceding code segment, be sure to include appropriate comments as internal documentation to your program.

3. Create an application that displays an X as output. Use any characters of your choosing when you design your prototype. The output should be displayed with white background and black text. One possible design is given here.

```

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

```

For an added challenge, use mostly tabs and newline characters as part of your design as opposed to just using the space character.

4. First develop a prototype and then write a program that displays the name of the programming language discussed in this text. The output should be displayed with white background and black text. You should be more creative, but one possible design is given here.

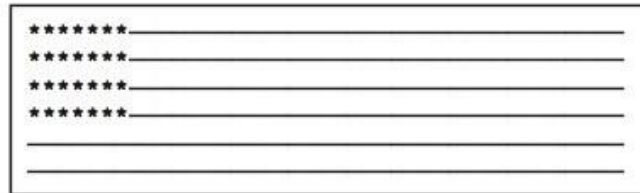
```

CCCCCCCCC
CC
CC
CC
CC
CC
CCCCCCCCC

      ##      ##
#####
      ##      ##
#####
      ##      ##

```

5. Flags are a symbol of unity and invoke special meaning to their followers. Create a design for a flag and write a program that displays your design. The output should be displayed with white background and black text. One possible design follows.



6. Create an application that produces three different outputs using the same phrase. Select your own favorite popular saying for the phrase. The phrase should first be displayed on a single line. The output should be displayed with white background and black text. Use at least three `Write()` methods—but display the output on a single line.

Next, print the phrase on three separate lines, again using only `Write()` methods. For your third and final output, print your favorite saying one word per line. Decide which combination of `Write()` and/or `WriteLine()` would be the most streamlined approach. Label each output. Following is an example of what the final output would look like using a favorite saying of the author:

```

Output #1
    Laugh often. Dream big. Reach for the stars!

Output #2
    Laugh often.
    Dream big.
    Reach for the stars!

Output #3
    Laugh
    often.
    Dream
    big.
    Reach
    for
    the
    stars!

```

7. Produce a listing containing information about you. Include items such as your name, hometown, major, hobby, and/or favorite activity. Label each piece of information, place each of the items on separate lines, and place a single backslash (\) after each entry. Begin and end the entire listing with the | character. Include the full listing in a box of asterisks.

Design the solution so that all items are displayed from `Write( )` methods. Ensure that your source code is readable and doesn't wrap if printed. The output should be displayed with white background and black text. Your output might look similar to the following:

```
=====
!      Name: Barbara Doyle\
!      Hometown: Jacksonville\
!      Major: CS\
!      Hobby: Biking\
!      Favorite Activity: Swimming\
=====
```

8. Hangman is a favorite childhood game. Design the stick figure for this game and produce a printed listing with your stickman. One possible design follows. You may implement this design or develop an improved version; however, you must include legs and arms that use the backslash symbol as part of your prototyped design. The output should be displayed with white background and black text.



9. Create an application that displays several patterns. You may use any character of your choice to construct the patterns. Design your solution to include at least three different patterns and display the three patterns on the same row. The output should be displayed with white background and black text. One possible solution follows.

```
*****      *      *
*****      ***      ***
*****      *****  *****
*****      *****  *****
*****      *****  *****
*****      *****  *****
*****      *****  *****
*****      *****  *****
*****      *****  *****
*****      *****  *****
*****      *****  *****
*****      *****  *****
```



10. Write a program that displays your initials in block characters so that each letter is made up of the character that it represents. Output should consist of at least 10 rows or lines and all initials must appear together in those rows. The output should be displayed with white background and black text. For example, the initials for Benjamin Andrew Jones in block characters are shown below.

```

BBBBBBBBBB      AA      JJJJJJJJJJJJJJJJ
BBB      BBB      AAAA      JJJJJJJJJJJJJJJJ
BB      BB      AA  AA      JJ
BB      BBB      AA  AA      JJ
BB      BB      AA  AA      JJ
BB      BB      AA  AA      JJ
BBBBBBBBBB      AA  AA      JJ
BB      BB      AAAA      JJ
BB      BB      AA  AA      JJ
BB      BBB      AA  AA      JJ
BB      BB      AA  AA      JJ
BBB      BBB      AA  AA      JJ
BBBBBBBBBB      AA      JJJJJJ

```