



Exercise Solutions

Code Magnets:

```
class Shuffle1 {
    public static void main(String [] args) {

        int x = 3;
        while (x > 0) {

            if (x > 2) {
                System.out.print("a");
            }

            x = x - 1;
            System.out.print("-");

            if (x == 2) {
                System.out.print("b c");
            }

            if (x == 1) {
                System.out.print("d");
                x = x - 1;
            }

        }

    }
}
```



```
File Edit Window Help Post
java Shuffle1
a-b c-d
```

dive In A Quick Dip

```
class Exerciselb {
    public static void main(String [] args) {
        int x = 1;
        while ( x < 10 ) {
            x = x + 1;
            if ( x > 3) {
                System.out.println("big x");
            }
        }
    }
```

A

This will compile and run (no output), but without a line added to the program, it would run forever in an infinite 'while' loop!

```
class Foo {
    public static void main(String [] args) {
        int x = 5;
        while ( x > 1 ) {
            x = x - 1;
            if ( x < 3) {
                System.out.println("small x");
            }
        }
    }
```

B

This file won't compile without a **class declaration**, and don't forget the matching curly brace!

```
class Exerciselb {
    public static void main(String [] args) {
        int x = 5;
        while ( x > 1 ) {
            x = x - 1;
            if ( x < 3) {
                System.out.println("small x");
            }
        }
    }
```

C

The 'while' loop code must be inside a method. It can't just be hanging out inside the class.

puzzle answers



```
class PoolPuzzleOne {
    public static void main(String [] args) {
        int x = 0;

        while ( X < 4 ) {

            System.out.print("a");
            if ( x < 1 ) {
                System.out.print(" ");
            }
            System.out.print("\n");

            if ( X > 1 ) {

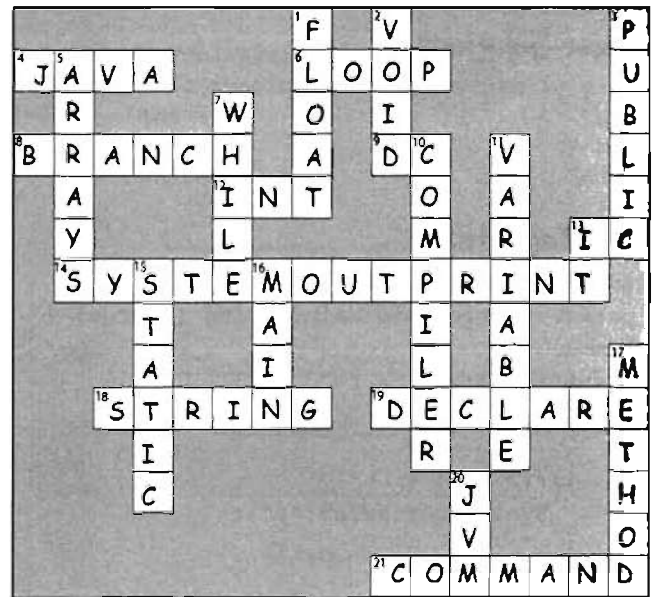
                System.out.print(" oyster");
                x = x + 2;
            }
            if ( x == 1 ) {

                System.out.print("noys");
            }
        }
        if ( X < 1 ) {

            System.out.print("oise");
        }
        System.out.println("");

        X = X + 1;
    }
}
```

```
The Edit Window Help Chart
%java PoolPuzzleOne
a noise
anncys
an oyster
```



```
class Test {
    public static void main(String [] args) {
        int x = 0;
        int y = 0;
        while ( x < 5 ) {
            System.out.print(x + " " + y + " ");
            x = x + 1;
        }
    }
}
```

Candidates:

```
y = x - y;
```

```
y = y + x;
```

```
y = y + 2;
if ( y > 4 ) {
    y = y - 1;
}
```

```
x = x + 1;
y = y + x;
```

```
if ( y < 5 ) {
    x = x + 1;
    if ( y < 3 ) {
        x = x - 1;
    }
}
y = y + 2;
```

Possible output:

```
22 46
```

```
11 34 59
```

```
02 14 26 38
```

```
02 14 36 48
```

```
00 11 21 32 42
```

```
11 21 32 42 53
```

```
00 11 23 36 410
```

```
02 14 25 36 47
```