CIS/CIT 149: Java I
Final Program
Worth 300 points

This assignment is worth 300 points. If the program compiles, **and follows the directions completely**, you will receive the entire 300 points as long as you include documentation (comments etc). **See directions as to what must be included in the program below**. Partial credit is given **only** if the directions have been followed. This includes programs that do not compile.

In this assignment you will create a console (standalone) application. This program will allow you to select Powerball numbers. For the first 5 numbers you will be requested to enter a number that is greater than zero and less than or equal to 59. However, there's a catch! Each number must be different. Here are some screen shots:
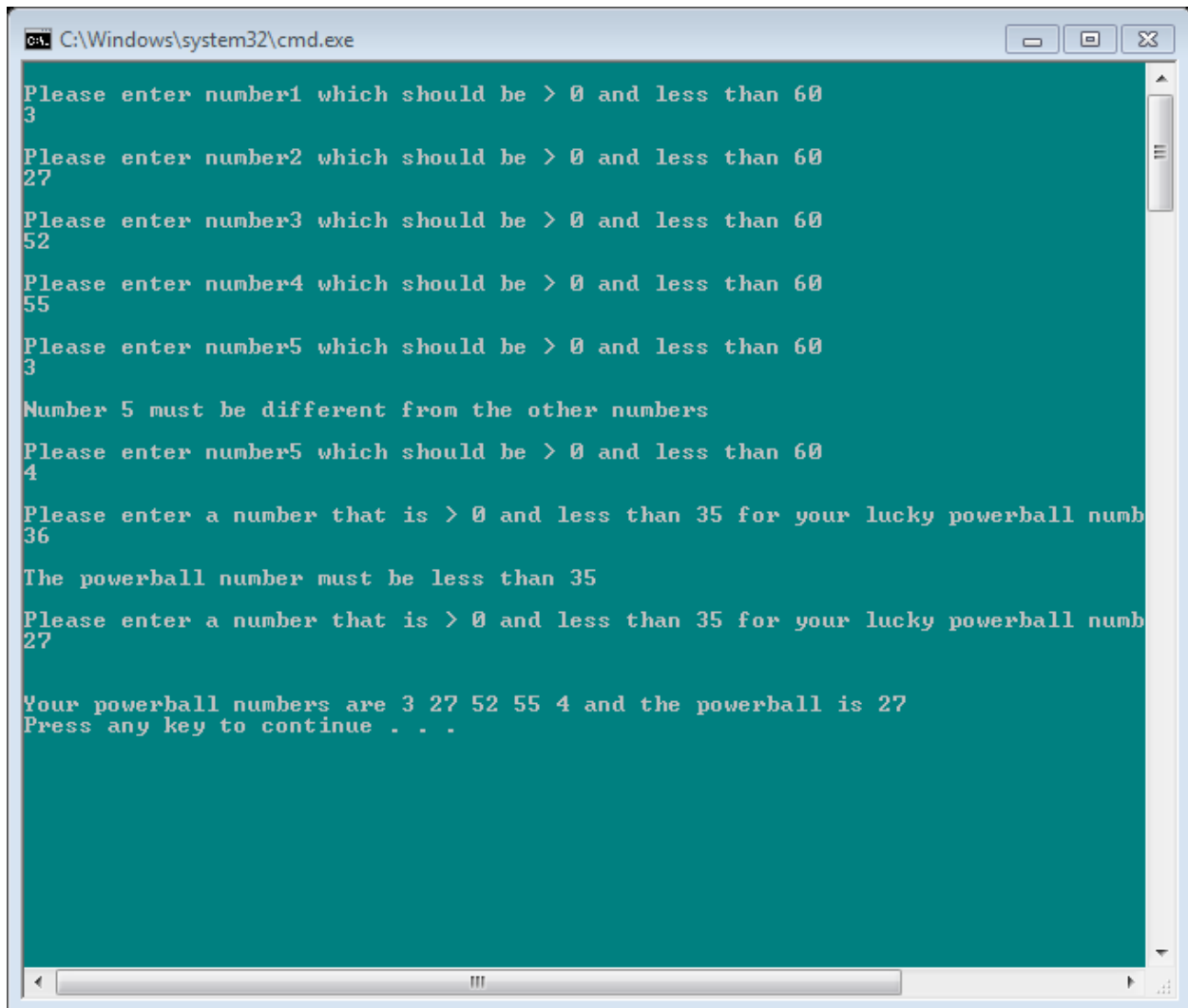
```
C:\WINDOWS\system32\cmd.exe                                        _ 日 X

Please enter number1 which should be > 0 and less than 60
61

Number1 must be less than 60

Please enter number1 which should be > 0 and less than 60
48

Please enter number2 which should be > 0 and less than 60
43

Please enter number3 which should be > 0 and less than 60
56

Please enter number4 which should be > 0 and less than 60
56

Number 4 must be different from numbers 1-3

Please enter number4 which should be > 0 and less than 60
46

Please enter number5 which should be > 0 and less than 60
88

Number5 must be less than 60

Please enter number5 which should be > 0 and less than 60
1

Please enter a number that is > 0 and less than 40 for your lucky powerball numb
er
55

The powerball number must be less than 40

Please enter a number that is > 0 and less than 40 for your lucky powerball numb
er
34


Your powerball numbers are 48 43 56 46 1 and the powerball is 34
Press any key to continue . . . _
```

When any of the first five numbers is less than 0 or greater or equal to 59 the user
will receive a message to this effect and will be asked to reenter the number. You
will create the code that will display one message when a number less than 1 is
entered and a different message if a number greater than 59 is entered.

If the number is the same as any number entered before it (with the exception of the powerball number) the user will receive a message to this effect and asked to reenter the number. This is the same for the second through fifth numbers. This is shown when the fourth number was the same as the third number.

```
C:\Windows\system32\cmd.exe                                    _  ▣  ⊠

Please enter number1 which should be > 0 and less than 60
3

Please enter number2 which should be > 0 and less than 60
27

Please enter number3 which should be > 0 and less than 60
52

Please enter number4 which should be > 0 and less than 60
55

Please enter number5 which should be > 0 and less than 60
3

Number 5 must be different from the other numbers

Please enter number5 which should be > 0 and less than 60
4

Please enter a number that is > 0 and less than 35 for your lucky powerball numb
36

The powerball number must be less than 35

Please enter a number that is > 0 and less than 35 for your lucky powerball numb
27

Your powerball numbers are 3 27 52 55 4 and the powerball is 27
Press any key to continue . . .
```

When entering the powerball number, if the number entered IS NOT between 0 and 35 then the user will receive a message to this effect and asked to reenter the number. One message will display if the number is less than 1, and a different if the number is greater than 35.

The following MUST be included in the program:

- You must have multiple classes. One that contains the accessor and mutator methods, a readInput() method and a writeOutput() method. You will not

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use the mutator methods but include them anyway to show that you know how to write them. Name this first program "Powerball.java".

- The second program is to be named "PowerballTest.java" and will be responsible for creating a Powerball object and calling the writeOutput() and readInput() methods from the Powerball class.

Submit both the following programs in zip format. You will not be asked to resubmit if you forget to include one of the files in your submission. Points will simply be deducted accordingly.

- Powerball.java
- Powerball.class
- PowerballTest.java
- PowerballTest.class