

1. In **Chapter 6**, do the following exercises:
Self-Review Exercises 6.1-6.6; Exercises 6.7, 6.11-6.13.

In **Chapter 21**, do the following exercises:
Self-Review Exercise 21.1

The above listed exercises are NOT to be handed in. They might be used on tests.

For all programming assignments, your names MUST appear twice in your program: First, in the comments at the top of your code; and **second**, in your output. For example, in the console window you can say “Programmed by Your Full Name”.

If you do not include your name you will lose 2 points.

At the top of every .java file this semester you MUST place the following:

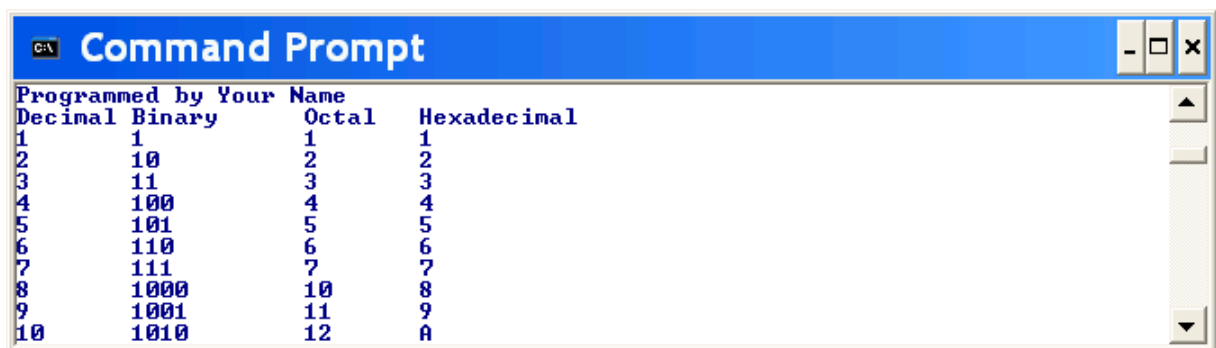
```
// Your Full Name
// Your Email @my.smccd.edu
// CIS 255 HJ
// File Name
// File Description
// Assignment #
// Date
```

2. Do Exercise 6.34 on page 238. Name your class **NumberConversion** and your test program **NumberConversionTest**. The **NumberConversion** class has three static methods: **convertToBinary**, **convertToOctal**, and **convertToHexadecimal**. Each method takes a decimal (base 10) argument and returns a **String** representation of the converted number. The **NumberConversionTest** program displays a table with the numbers 1-256 in decimal, binary, octal, and hexadecimal format. Use **printf** to format the columns. Be sure to test your program thoroughly. Be sure to comment your code. **Note: you MUST do math to convert the decimal numbers. You must follow all Programming Guidelines.**

For information about different number systems see Wikipedia:

http://en.wikipedia.org/wiki/Binary_numeral_system

SAMPLE OUTPUT:



```

C:\> Command Prompt
Programmed by Your Name
Decimal Binary      Octal  Hexadecimal
1       1           1       1
2       10          2       2
3       11          3       3
4       100         4       4
5       101         5       5
6       110         6       6
7       111         7       7
8       1000        10      8
9       1001        11      9
10      1010        12      A
  
```

SUBMIT: You must submit a printed copy of your source code. All files (including .class files) must also be uploaded to WebAccess as a single zipped file. Find the week that the assignment is due and click on the assignment upload link. Name your zip file assign1.zip. Make sure that you submit ALL FILES, as I am not able to grade incomplete assignments. All assignments are due at 5:00 PM on the due date.

An easy way to zip in Windows is to right-click on your file and then choose Send To-> Compressed (zipped) Folder

On a Mac follow these instructions to zip your files:

<http://www.macinstruct.com/node/159>

Upload the assign1.zip file to the upload link in WebAccess by the due date/time.

<http://smccd.mrooms.net>