한양대학교

OBJECT-ORIENTED SYSTEMS DESIGN (Lab2)

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2-1

Write a program *PrintfDemo* that prints the output in the next page.

Create a variable *String aString* whose value is “abc”, a variable *char oneCharacter* whose value is “Z”, and a variable *double d* whose value is 12345.123456789. You should use Formatting.

2-1

<output>

```
String output:
START1234567890
STARTabcEND
START abcEND
STARTabcEND

Character output:
START1234567890
STARTZEND
START     ZEND

Floating-point output:
START1234567890
START12345.123457END
START12345.1235END
START12345.12END
START  12345.1235END
START1.234512e+04END
START 1.23451e+04END
```

2-2

Write a program *ScannerDemo* that prints the output in the next page.

Create two variables *numberOfPods* and *peasPerPod* to store input values, and a variable *totalNumberOfPeas* to store the value calculated by the following equation.

totalNumberOfPeas = *numberOfPods* * *peasPerPod*;

<output>

Input →

```
Enter the number of pods followed by
the number of peas in a pod:
22 10
22 pods and 10 peas per pod.
The total number of peas = 220
```

2-3

Write a program *ScannerDemo2* that prints the output in the next page.

Create variables *n1*, *n2*, *d1*, *d2*, *word1*, *word2*, *junk*, and *line* to store input appropriately.

<output>

```
Enter two whole numbers
separated by one or more spaces:
 42 43
You entered 42 and 43
Next enter two numbers.
A decimal point is OK.
 9.99 57
You entered 9.99 and 57.0
Next enter two words:
jelly beans
You entered "jelly" and "beans"
Next enter a line of text:
Java flavored jelly beans are my favorite.
You entered "Java flavored jelly beans are my favorite."
```

Input → 42 43

Input → 9.99 57

Input → jelly beans

Input → Java flavored jelly beans are my favorite.

2-4

Write a program *SelfService* that prints the output in the next page.

Create two variables *count* and *price* to store input values, and a variable *total* to store the value calculated by the following equation.

*total = count * price*

<output>

```
Enter number of items purchased
followed by the cost of one item.
Do not use a dollar sign.
Input → 10  19.99
10 items at $19.99 each.
Total amount due $199.90.
Please take your merchandise.
Place $199.90 in an envelope
and slide it under the office door.
Thank you for using the self-service line.
```

2-5

Write a program *DelimiterDemo* that prints the output below.

Create variables *word1*, *word2* and *junk* to store input appropriately.
You should use method *useDelimiter()*.

<output>

Input

```
Enter a line of text:
one  two##three##
For keyboard1 the two words read are:
one
two##three##
Reenter the same line of text:
one  two##three##
For keyboard2 the two words read are:
one two
three
```

Input

2-6

Make a file *player.txt* and write a program *TextFileDemo* that prints the output below. Create variables *highscore* and *name* to store values from the file. You should use try/catch block and methods *hasNextLine()* and *close()*.

<player.txt>

```
100510
Gordon Freeman
```

<output>

```
Text left to read? true
Name: Gordon Freeman
High score: 100510
Text left to read? False
```