

**COSC 24L3: Lab Assignment #3**  
**Computer Science Department @ Dallas Baptist University**  
**Fall 2023**

1. BetterBuy launched a Labor Day sale. It offered three levels of sale packages:

Package Platinum:

70" Smart TV + iPhone 13 Pro Max + MacBook Pro

Package Gold:

iPhone 13 Pro Max + MacBook Pro

Package Silver:

MacBook Pro

The program prints a menu asking the user to input package name, P or p for Platinum, G or g for Gold, and S or s for Silver. It will then print package items. The program loops back printing menu and asking user input until user input Q (for quit). If the user's input is not P, G, S, or Q, the program prints error message asking the user to input again. Implement your program using switch, no if's.

**Sample run:**

```
>>> Labor Day Sale <<<
P: Package Platinum
G: Package Gold
S: Package Silver
Q: Quit
```

```
Package> g
iPhone 13 Pro Max
MacBook Pro
```

```
>>> Labor Day Sale <<<
P: Package Platinum
G: Package Gold
S: Package Silver
Q: Quit
```

```
Package> P
70'' Smart TV
iPhone 13 Pro Max
MacBook Pro
```

```
>>> Labor Day Sale <<<
P: Package Platinum
G: Package Gold
S: Package Silver
Q: Quit
```

```
Package> s
MacBook Pro
```

```
>>> Labor Day Sale <<<
P: Package Platinum
G: Package Gold
S: Package Silver
Q: Quit
```

```
Package> A
Invalid Package
```

```
>>> Labor Day Sale <<<
P: Package Platinum
G: Package Gold
S: Package Silver
Q: Quit
```

```
Package> Q
Bye!
```

2. Write a program that plays a simple dice game between the computer and the user. When the program runs a loop. Each iteration of the loop should do the following:

- Generate a random integer in the range of 1 through 6. This is the value of the computer's die.
- Generate another random integer in the range of 1 through 6. This is the value of the user's die.
- The die with the highest value wins. (In case of a tie, there is no winner for that particular roll of the dice.)
- Ask the user if he/she wants to play again.

As the loop iterates, the program should keep count of the number of times the computer wins, and the number of times that the user wins. After the loop performs all of its iterations, the program should display who was the grand winner, the computer or the user.

**Sample run:**

What's your name: *Paul*

Game 1:

Paul 3

Computer 2

> Winner: Paul

Play again? *Y*

Game 2:

Paul 2

Computer 2

> Tie

Play again? *y*

Game 3:

Paul 1

Computer 6

> Winner: Computer

Play again? *y*

Game 4:

Paul 5

Computer 4

> Winner: Paul

Play again? *n*

Paul : Computer

2 : 1

Grand Winner: Paul