Pages 47 ***Java Programming A Comprehensive Introduction***

***Char*** – character is a primitive data type, and a single character.

String in Java- are objects, and can have zero to multiple characters. It occupy more memory blocks.

What is the difference between String and ***char*** in Java? – character can have only one character while string can have character from zero to multiple characters. Char uses single quotation while string use double quotations.

char ch;

        ch = 'A'; //Z //z //9

        System.out.println("ch contains " + ch);

        Output- it print out letter ‘A’

        ch++;

        System.out.println("ch is now " + ch);

What will the second prinln output? – it will printout ‘B’ .

Object- Objects are something that consist of state and related behaviors.

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-(Pg.84 in Java Programming)-

**switch** (*expression*) {

**case** constant 1:

*statement sequence*

**break**

**Programming Assignments**

**1st Task:** Create a program that uses a **switch** statement and **case** statements to calculate the number of days in any given month based upon a users input.

February is a unique month. So the **case** for February will needa **if**… **else** to capture the two possible options for the number of days in February based upon leap year.

Hint\*\*\*. You will need to use some of the code from Assignment 4, Task 3.

Use the **new** Scanner (System.in); method for input. Make sure the program can deal with any integer input. If a number entered does not correspond to a month of the year print “Invalid Month.”

**Programming Assignments**

**1st Task-**

Use a Do-While loop and Switch Case to create menu of programs you have already created.

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**\* Main Menu: \***

**\* Enter # to run program or Quit \***

**\* 1) Moon Weight Calculator \* //Assignment 3 task 1**

**\* 2) Seconds Conversion to Mins and Hours\* //Assignment 4 task 2**

**\* 3) Grade Range \* //Assignment 5 task 1**

**\* 4) Quit \***

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**You Selected Option 1:**

**Enter Earth Weight:**

**120**

**Moon Weight: 100lbs**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**\* Main Menu: \***

**\* Enter # to run program or Quit \***

**\* 1) Moon Weight Calculator \***

**\* 2) Seconds Conversion to Mins and Hours\***

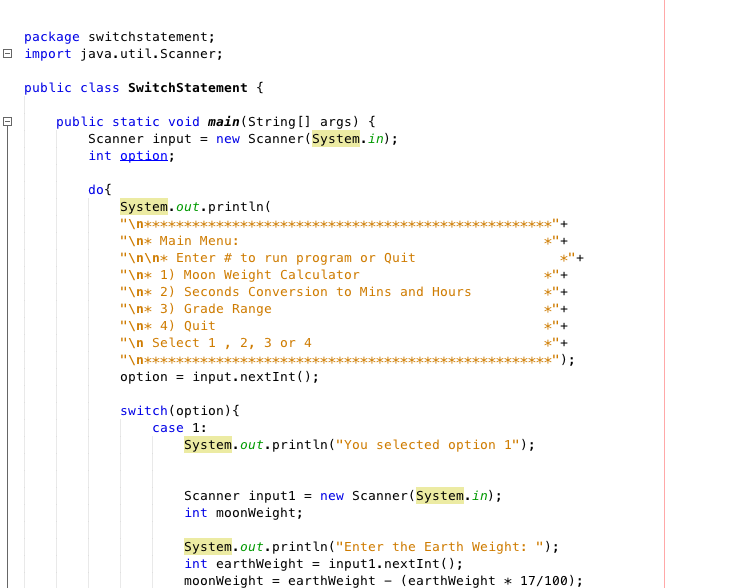
**\* 3) Grade Range \***

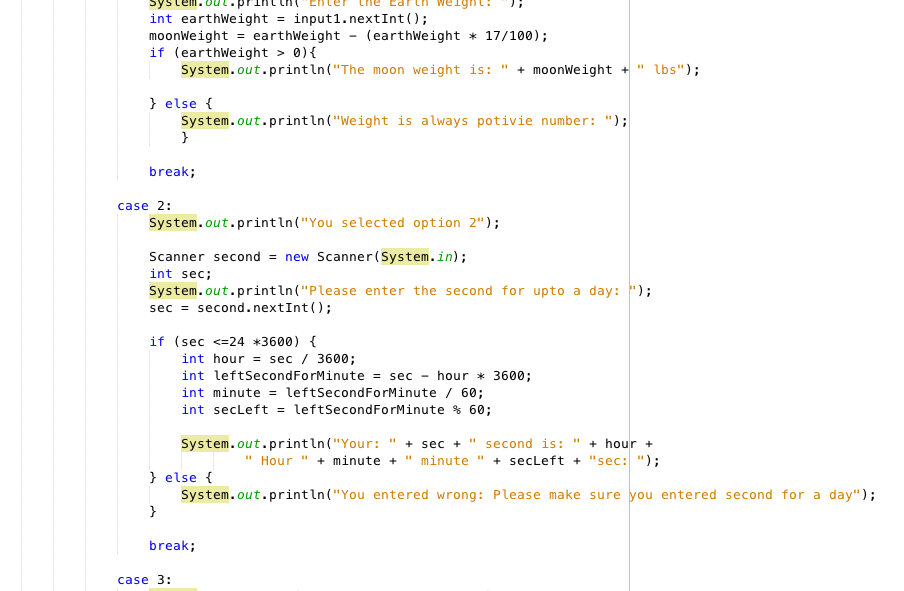
**\* 4) Quit \***

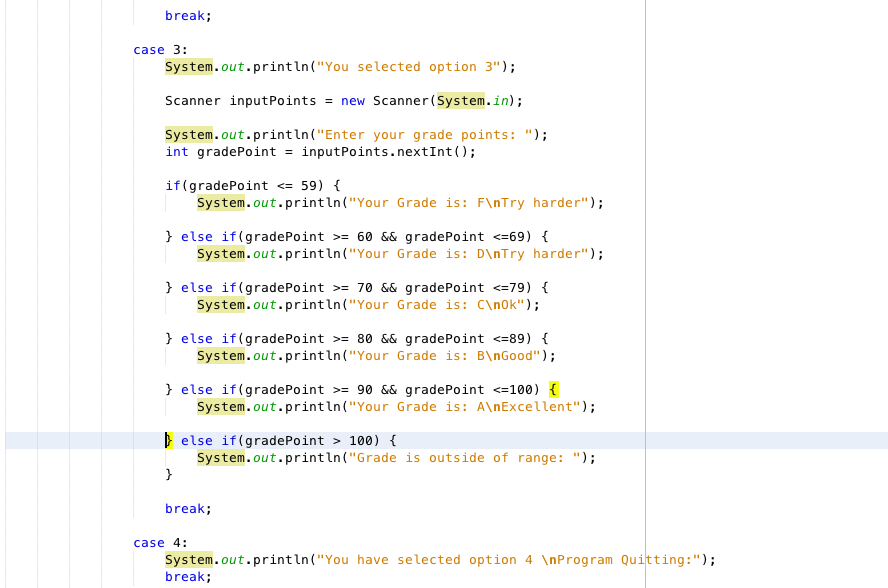
**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

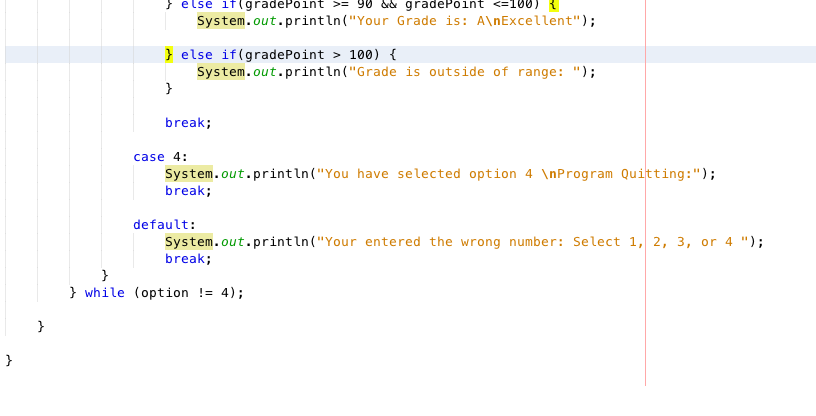
**You selected Option 4:**

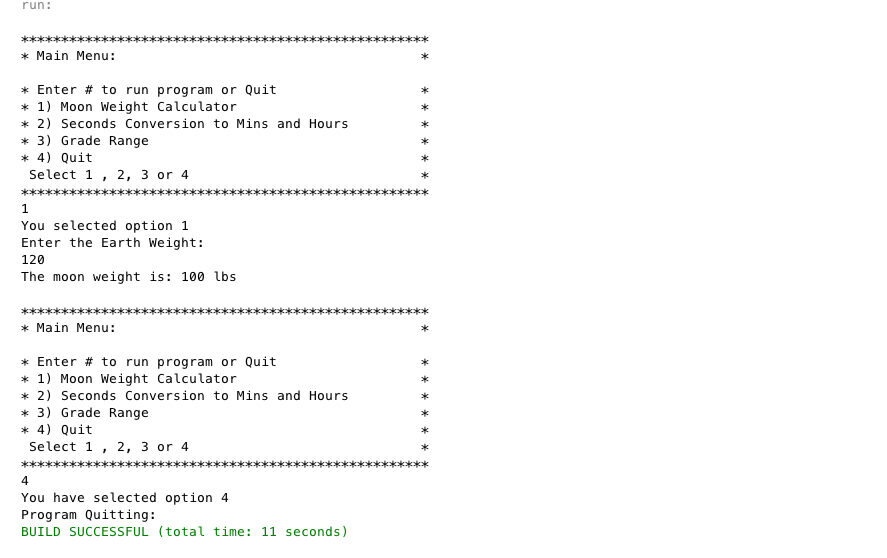
**Program Quitting**

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