

1. Your task is to implement a “**calculator**” similar to the command pattern example on the blackboard.
2. **(1st Hour)** Download the command pattern example, compile and run it.
3. **(1st Hour)** In the example, we have only one concrete **Command** class. It accepts a parameter used for determining the type of the arithmetic operation. You will change this. Instead of one single Command class you will create 4 different concrete command classes corresponding to each arithmetic operation (+, - , *, /). This means you do not need the **operator** parameter anymore. Also you do not need to have **Undo** method anymore.
4. **(1st Hour)** Try these commands by creating one for each in the main.
5. **(2nd Hour)** Next, you will create a “macro command” called **Circumference** that calculates the circumference of a circle. The circumference of a circle is calculated as $2 * \pi * r$ where π is 3.14 and r is the radius (Hint: Do we need a receiver for the macro command?)
6. **(2nd Hour)** Your macro command will store its sub commands in a data structure of your choice (e.g. array, ArrayList, LinkedList). Provide an **add** method so we can populate the macro command with subcommands.
7. **(2nd Hour)** Test your macro command to calculate a circle’s circumference. Its radius will be provided by the User.