**Scenario**

In this scenario, we must input a specified string of text that we want the shell to return as output. We'll also need to input a few mathematical calculations so the OS can return the result.

**First**, we’ll use the echo command to generate some output in the shell. **Second**, we’ll use the expr command to perform basic mathematical calculations. **Next**, we’ll use the clear command to clear the Bash shell window.

**Task 1. Generate output with the echo command**

1. Type **echo hello** into the shell and press **ENTER**.



**hello** is the **output** from the shell.

1. Return the command, but include quotation marks around the string data. Type echo "hello" into the shell and press **ENTER**.



***Note:****The output is the same as before. The quotation marks are****optional****in this case, but they tell the shell to group a series of characters together.*

**Task 2. Generate output with the expr command**

The **expr**command performs basic mathematical calculations and can be useful when we need to quickly perform a calculation.

1. Calculate the number of false positives using the expr command.

The system has shown that we have 32 alerts, but only 8 required action. We want to calculate how many alerts are false positives so that we can provide feedback to the team that configures the alerts.

To do this, we need to type **expr 32 - 8** into the shell and press **ENTER**.



***Note:****The expr command requires that all terms and operators in an expression are separated by spaces. For example : expr 32 - 8, and****not****expr 32-8.*

1. Calculate the average number of login attempts that are expected over the course of a year.

From the information we have, we know that an average of 3500 login attempts have been made each month so far this year. So, to calculate the total number of logins expected in a year, we type **expr 3500 \* 12** into the shell and press **ENTER**.



**Task 3. Clear the Bash shell**

The clear command is used to clear the Bash shell of all existing output. Before we clear it, the shell had this output:

A screen shot of a computer

AI-generated content may be incorrect.

Then we type **clear** into the shell and press **ENTER**.

This is the output:

