## Week 11

## **Shell Scripting – Exercises**

- 1. Write a script that prints "Hello World!"
- 2. Write a script that uses two variables initialized to 80 and 2 respectively and prints their quotient
- 3. Write a script for a program that asks the user to enter the name and then outputs "Hello (name). Welcome to shell scripting."
- 4. Write a program that allows the user to enter a value. The program adds 1 to that number and outputs the result.
- 5. Modify Question 2 so that the user inputs the two numbers.
- 6. Modify Question 3 so that the program gets two inputs from the user: the first and the last name. The output must contain both.
- 7. Write a program that allows the user to enter a value. The program doubles the number and outputs the result.
- 8. Write a program that uses two variables initialized to 80 and 4 and calculates their sum, their difference, their product, their quotient and the remainder of the division.
- 9. Write a program that gets two numbers from the users and calculates their sum, their difference, their product, their quotient and the remainder of the division.
- 10. Write a program that gets the age from the user in years and prints out the approximate age in days
- 11. Modify Question 9 so that the user enters both the age in years and months and the program outputs an approximation of their age in days.
- 12. Write a program that prints the square of a number if the square is bigger than 90.

- 13. Write a program that asks the user to enter two numbers. If the first number entered is bigger than the second the program should output the sum of the two numbers, otherwise the program should output the difference of the two numbers.
- 14. Write a program that asks the user to enter two numbers. If the first number entered is even than the second the program should output the product of the two numbers, otherwise the program should output the difference of the two numbers.
- 15. Write a program that allows the user to enter a value for one edge of a cube. The program calculates the surface area of one side of the cube, the surface area of the cube, and its volume. The program outputs all the results.
- 16. Write a program that allows the user to enter two values a and b. The program outputs a<sup>b</sup> and b<sup>a</sup>.
- 17. a. Write a program that allows the user to enter values for the width and length of a room's floor in feet. The program outputs the area of the floor in square feet.
  - b. Modify the program that computes floor area to compute and output the number of 6-inch square tiles needed to tile the floor.
- 18. a. Write a program that allows the user to enter values for the width and length of a wall in feet. The program outputs the area of the wall in square feet.
  - b. Modify the program that computes wall area to allow the user to enter the price of a gallon of paint. Assume that a gallon of paint covers 350 square feet of a wall. The program outputs the number of gallons needed and the cost of the job. (For this exercise, assume that you do not need to account for windows or doors, and that you can purchase partial gallons of paint.)
  - c. Modify the program that computes paint cost to allow the user to enter the number of doorways that do not have to be painted. Assume each doorway is 14 square feet. Output the number of gallons needed and the cost of the job.