Module 5 - Assignment

Problem Statement:

You work for xyz organization. Your organization uses a UNIX/Linux based server.

You have been asked to:

- 1. Create 2 shell script files one.sh and two.sh
- 2. In one.sh, create a code which involves looping statements, Conditional statements and 3 functions
- 3. In two.sh, create a Case..esac statement in which first option runs the first function, 2nd option runs 2nd function and 3rd option runs the third function
- 1. Creating script one.sh containing a loop, a conditional statement, and three functions.

```
nano one.sh
```

The contents:

```
#!/bin/bash
# Function to greet
greet() {
 echo "Hello, $1"
}
# Function to calculate square of a number
square() {
 echo "Square of $1 is $(($1 * $1))"
}
# Function to check if a number is even or odd
check_even_odd() {
 if [ $(($1 % 2)) -eq 0 ]; then
   echo "$1 is even"
 else
   echo "$1 is odd"
 fi
}
# Loop to call functions
for i in 1 2 3; do
 if [ $i -eq 1 ]; then
```

```
greet "User"
elif [ $i -eq 2 ]; then
    square 4
elif [ $i -eq 3 ]; then
    check_even_odd 5
fi
done
```

Making script executable:

```
chmod +x one.sh
```

Testing one.sh

```
vagrant@ubuntu-bionic:~$ nano one.sh
vagrant@ubuntu-bionic:~$ chmod +x one.sh
vagrant@ubuntu-bionic:~$ ./one.sh
Hello, User
Square of 4 is 16
5 is odd
vagrant@ubuntu-bionic:~$
```

2. Creating script two.sh containing a case..esac statement to call the functions defined in one.sh.

```
nano two.sh
```

The contents:

```
#!/bin/bash
# Source the functions from one.sh
source ./one.sh
# Menu for case..esac
echo "Choose an option:"
echo "1. Greet User"
echo "2. Square a number"
echo "3. Check if a number is even or odd"
read choice
# Case..esac statement
case $choice in
 1)
   greet "User"
   ;;
 2)
    square 4
```

```
;;
3)
  check_even_odd 5
;;
*)
  echo "Invalid choice"
;;
esac
```

Making script executable:

```
chmod +x two.sh
```

Testing two.sh

```
vagrant@ubuntu-bionic:~$ ./two.sh
Hello, User
Square of 4 is 16
5 is odd
Choose an option:
1. Greet User
2. Square a number
3. Check if a number is even or odd
2
Square of 4 is 16
vagrant@ubuntu-bionic:~$
```

Executing two.sh also executes one.sh that's why we see its output at the beginning. Then we see the output of two.sh which prompts us to pick an option, I picked 2 which triggered function square