OSSD Practice 1

1.Github

2.
```
#!/bin/bash
echo "Hello, World!"
```

3.
```
#!/bin/bash
echo -n "Please enter your name: "
read name
echo "Hello, $name!"
```

4.
```
#!/bin/bash
echo -n "Enter a number to calculate its factorial: "
read num
fact=1
for ((i=1; i<=$num; i++)); do
   fact=$((fact * i))
done
echo "Factorial of $num is $fact"
```

5.
```
#!/bin/bash
echo -n "Enter the directory path: "
read directory
echo -n "Enter the filename to check: "
read filename
if [ -e "$directory/$filename" ]; then
   echo "$filename exists in $directory"
else
   echo "$filename does not exist in $directory"
fi
```

6.
```
#!/bin/bash
echo -n "Enter the directory path: "
read dir
ls -l "$dir"
```

7.
```
#!/bin/bash
echo -n "Enter the file path: "
```

```
read filepath
if [ -e "$filepath" ]; then
    lines=$(wc -l < "$filepath")
    echo "Number of lines in $filepath: $lines"
else
    echo "File not found!"
fi
```

8.

```
#!/bin/bash
echo -n "Enter the first number: "
read num1
echo -n "Enter the second number: "
read num2
echo "Sum: $(($num1 + $num2))"
echo "Difference: $(($num1 - $num2))"
echo "Product: $(($num1 * $num2))"
if [ "$num2" -ne 0 ]; then
    echo "Division: $(($num1 / $num2))"
else
    echo "Division by zero is undefined."
fi
```

9.

```
#!/bin/bash
echo -n "Enter a string: "
read string
reverse=$(echo "$string" | rev)
if [ "$string" == "$reverse" ]; then
    echo "$string is a palindrome."
else
    echo "$string is not a palindrome."
fi
```

10.

```
awk -F ',' '{print $2}' file.csv
```

11. `awk -F '\t' '{sum+=$3} END {print "Total sum:", sum}' file.tsv`

12. `sed -i 's/apple/orange/g' file.txt`

13. `sed -i '/^$/d' file.txt`