

Solution Assignment 3

Solution1.

```
#!/bin/bash
a=10
b=20
sum=$(( $a + $b ))
echo "Sum is: $sum"
```

Solution2.

```
#!/bin/bash
VAR1="Linuxize"
VAR2="Linuxize"
if [ "$VAR1" = "$VAR2" ]; then
echo "Strings are equal."
else
echo "Strings are not equal."
fi
```

Solution3.

```
#!/bin/bash
read n
a=0
b=1
echo "The fibonacci Series is "
echo "$a"
echo "$b"
for (( i = 0; i < n; i++ )); do
c=$(( $a + $b ))
echo "$c"
a=$b
b=$c
done
```

Solution4.

```
#!/bin/bash
echo "Enter any character: "
read ch
case $ch in
"a") echo "It is a vowel.>";;
"e") echo "It is a vowel.>";;
"i") echo "It is a vowel.>";;
"o") echo "It is a vowel.>";;
"u") echo "It is a vowel.>";;
*) echo "It is not a vowel."
esac
```

Solution5.

```
read file
echo "$file"
echo "number of characters are:"
cat "$file" | wc -c
echo "number of words are:"
cat "$file" | wc -w
echo "number of lines are:"
cat "$file" | wc -l
```

Solution6.

```
read file
echo "$file"
file_size=$(du -h "$file" | cut -f1)
echo "File Size: $file_size"
permissions=$(ls -l "$file" | awk '{print $1}')
echo "Permissions: $permissions"
owner=$(ls -l "$file" | awk '{print $3}')
```

```
echo "Owner: $owner"  
modification_time=$(stat -c "%y" "$file")  
echo "Modification Time: $modification_time"
```

Solution7.

```
#!/bin/bash  
# Display OS version  
echo "OS Version:"  
cat /etc/os-release  
# Display CPU information  
echo "CPU Information:"  
lscpu  
echo "Memory Information:"  
free -h  
# Display disk usage  
echo "Disk Usage:"  
df -h  
# Display network details  
echo "Network Details:"  
ip addr
```