Problem: 1

Write a shell script program to find even/odd number.

```
#!/bin/bash/
read -p "Enter Number: " a

if(($(( a % 2 ))==0))
then
    echo "Even Number"
else
    echo "Odd Number"
fi
```

```
DIU@DESKTOP-3AT85QD MINGW64 ~/documents/shell
$ bash text.sh
Enter Number: 7
Odd Number

DIU@DESKTOP-3AT85QD MINGW64 ~/documents/shell
$ bash text.sh
Enter Number: 14
Even Number
```

- **Additional Information:**

You may use relational operator without symbol using some key.

Operator	Example
-eq	[$a -eq $b] is not true.
-ne	[$a -ne $b] is true.
-gt	[$a -gt $b] is not true.
-lt	[$a -lt $b] is true.
-ge	[$a -ge $b] is not true.
-le	[$a -le $b] is true.

It is very important to understand that all the conditional expressions should be placed inside square braces with spaces around them. For example, **[$a <= $b]** is correct whereas, **[$a <= $b]** is incorrect.

Example:

```
#!/bin/bash/
read -p "Enter Number: " a
read -p "Enter Number: " b

if [ $a -gt $b ]
then
        echo " a is grater"
else
        echo " b is grater"
fi
```

```
DIU@DESKTOP-3AT85QD MINGW64 ~/documents/shell
$ bash text.sh
Enter Number: 5
Enter Number: 3
 a is grater
```

3. Boolean Operators**:**

- The following Boolean operators are supported by the Bourne Shell.
- Assume variable **a** holds 10 and variable **b** holds 20 then –

Operator	Description	Example
!	This is logical negation. This inverts a true condition into false and vice versa.	[! false] is true.
-o	This is logical **OR**. If one of the operands is true, then the condition becomes true.	[$a -lt 20 -o $b -gt 100] is true.
-a	This is logical **AND**. If both the operands are true, then the condition becomes true otherwise false.	[$a -lt 20 -a $b -gt 100] is false.

Problem: 2

write a Shell Script to find Greatest of Three numbers

```
#!/bin/bash/
read -p "Enter Number: " a
read -p "Enter Number: " b
read -p "Enter Number: " c

if [ $a -gt $b -a $a -gt $c ]
then
        echo "a is grater"
elif [ $b -gt $a -a $b -gt $c ]
then
        echo "b is grater"
else
        echo "c is grater"
fi
```

```
DIU@DESKTOP-3AT85QD MINGW64 ~/documents/shell
$ bash text.sh
Enter Number: 5
Enter Number: 7
Enter Number: 3
b is grater
```

Practice:
write a Shell Script to find lowest of Three numbers

5. File Test Operator:
These operators are used to test a particular property of a file.
-e operator: This operator checks whether the given file exists or not. If it exits this operator returns true otherwise false.

Problem 3: Write a shell script to check given file exist or, not.

```
#!/bin/bash/
#reading data from the user
read -p 'Enter file name : ' FileName

if [ -e $FileName ]
then
    echo "File Exist"
else
    echo "File doesn't exist"
fi
```

```
DIU@DESKTOP-3AT85QD MINGW64 ~/documents/shell
$ bash text.sh
Enter file name : text.txt
File Exist
```