

- Q1) How to Create Shell Script in Linux/Unix?
 Ans) Shell Script are written using the text editor.

* Steps to Create Shell Script:

- 1) Create a file using a name editor. Name Script file with extension.
- 2) Start the Script with #!/bin/sh
- 3) Write some code
- 4) Save the file using Ctrl+S
- 5) for executing the Script file from terminal

Ex- #!/bin/sh

echo "What is your name?"

Read me

echo "How do you do, Name?"

Read Name

echo "I am \$Name too!"

Q2) Write about the Control Statement in Linux.

* There are three types of Control Statements which can be used in bash programming.

(i) If Statement = if the condition is true it will print the statement.

Syn = if [condition]

do

Statement

fi

Ex = if [\$a == \$b]

do
echo "A is equal to B"

(2) If-else Statement if the expression is not true then else part will be executed.

```
Syn = if [Expression]
      then
        Statement 1
      else
        Statement 2
      fi
```

```
Ex = if [A % 2 == 0]
      then
        echo "a is even"
      else
        echo "a is odd"
      fi
```

(3) If... else... else... fi Statement (Else if keyword) To bypass multiple conditions in one if-else block, then else keyword is used in shell. If any exp is true it will execute that particular section otherwise it will execute else section.

```
Syn = if [Expression 1]
      then
        Statement 1
        Statement 2
        :
      elif [Expression 2]
      then
        Statement 3
        Statement 4
        :
      else
        Statement 5
      fi
```


ex: if [a > b]

then

exec "Sa is greater than Sb"

elif [a < b]

then

exec "Sa is less than Sb"

else

exec "Sa is equal to Sb"

fi

(4) Switch Statement \rightarrow Case statement works as a switch statement if specified value matches with pattern then it will execute a block of that particular pattern.

* A case will be traversed until the last common is reached.

* if there is no match, the exit from of case is zero.

Syn = Case in

Pattern 1) Statement 1;

Pattern 2) " Statement 2;

Pattern 3) Statement 3;

Pattern n) Statement n;

case

Ex = Car = "BMW"

Case "Car" in

```
# Case 1 "Mercedes" echo "Henderson - Germany";
```

```
# Case 2
```

```
"Ami") echo "Henderson - India";
```

```
# Case 3
```

```
"Ami") echo "Henderson - India";
```

```
done
```

Q3) What are the looping statements in shell scripting?

A) There are total 3 looping statements which can be used in shell programming

(1) While Statement in this command is evaluated and based on the result loop will execute. If result is false loop will be terminated.

```
Syn: While [condition]
```

```
do
```

```
Statement 1
```

```
Statement 2
```

```
done
```

```
ex: i=1
```

```
while [ $i -le 10 ]
```

```
do
```

```
echo $i
```

```
i=$((i + 1))
```

```
done
```

(2) Until loop → The until loop is used when you need to execute a set of commands until a condition is true.

Syn → Until [Condition]

do

Statement 1

Statement 2

done

ex = i = 1

While [! \$i -lt 10]

do

echo \$i

i = `expr \$i + 1`

done

(3) for loop → It is a loop programming language statement which allows code to be repeated. Ex:

Syn → for [Variable - name] in ...

do

Statement 1

Statement 2

Statement 3

done

Ex for no in { 1..10 }

do

echo \$no

done