[LSI DAY-02.]

Q Explain conditional statement with examples?

⇒ Conditional statements are used to check a particular condition and if true then the statement of that condition will be executed.

Conditional Operator

- eq - equal to
- lt - less than
- gt - greater than
== two strings are equal
!= Not equal to

2) If statements

→ A condition is checked if true then the statement with then condition will be executed

Syntax:

```
if [condition];
commands/statements
fi
```

2) Ex:

```
echo "Enter a number"
read n
if [$n -lt 100];
then
  echo "$n is less than 100"
```

⇒ if-else:

If condition is written if true then if block will be executed or else block will be performed.

Syntax:

```
if [condition];
then
command (s)
else
    command (s)
fi
```

Ex:

```
a=10
b=20
if [a -gt b]
  who "a is greater"
else
    who "b is greater"
```

⇒ if-elif-else statement → Multiple of statements are written and their condition are checked and if statement if is false then else block will be performed

Syntax:

```
if [condition]
then
    commands
elif [condition]
then
    commands
fi
```

Ex: a=10;
b=20;
c=20;

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

⇒ Nested if:

if condition are written inside another if condition

Syntax: if [condition] then
commands
if [condition] then
command
fi
fi

⇒ Case Statement:

Case statement can be used as an alternative to if statement

Syntax: case in
pattern 1) command;
2) command;
else

Ex: N1 = $1
N2 = $2
N3 = $3
case "$ op " in +)
((Result = $N1 + $N2));;
((Result = $N1 - $N2));;
((Result = $N1 * N2));;
((Result = $N1 / $N2));;

*) echo "wrong number of arguments"
exit 0;;
esac
echo "$ N1 $op $N2 = $ Result"

(2) Explain looping statement with example!

(1) Until Statements:

Here command i/p ~~executed~~ evaluated and based on the result loop will be executed if condition is ~~true~~ false then loop will be terminated.

Ex: n=10
until [$a -lt 0]
do
echo $a
a=`expr $a -1`

② while:

while loop enables you to execute a set of commands repeated by until some conditions

Ex:

```
i=1
while[$1 -le 10]
do
  echo $i
  i='expr $i+1'
done
```

③ for loop

A for loop is a statement which allows code to be repeatedly executed

Ex: for no in $1 -10$

```
do
  echo $no
done
```

④ Switch Statement:

Case statements works as a switch statement if specified value match with one pattern then it will execute a block of that particular pattern

Syntax: Case 'in

pattern 1) Statement;

2) Statement;