Programming Constructs – if – elif Selection Statements

2. Selection Statement

1. A selection statement provides for selection between alternatives
2. A program can take certain route depending on a situation and selection statements help in choosing between the routes.

2. Selection Statement Types

1. If statements
2. Case Statements
3. Pattern Matching

If Statements

1. *if [condition] then action1 fi*
2. *if [condition] then action1 else action2 fi*
3. *if [condition] then action1*
   elif [condition] then action2
   else action3 fi

If, elif and else statement

```
#!/bin/bash -x

var1=10
var2=10
if [ $var2 -gt $var1 ]
then
        echo "$var2 is greater than $var1"
elif [ $var2 -eq $var1 ]
then
        echo "Variables are equal"
else
        echo "$var2 is less then $var1"
fi

ifeliftest.sh (END)
```

```
Narayans-MacBook-Pro:TerminalCommands narayan$ ./ifeliftest.sh
+ var1=10
+ var2=10
+ '[' 10 -gt 10 ']'
+ '[' 10 -eq 10 ']'
+ echo 'Variables are equal'
Variables are equal
```

UC 3

Add Part time Employee & Wage

Adding Part time Employee Wage

```
#!/bin/bash -x

isPartTime=1;
isFullTime=2;
empRatePerHr=20;
randomCheck=$((RANDOM%3));

if [ $isFullTime -eq $randomCheck ];
then
        empHrs=8;
elif [ $isPartTime -eq $randomCheck ];
then
        empHrs=4;
else
   empHrs=0;
fi

salary=$(($empHrs*$empRatePerHr));
empWageIf.sh (END)
```

```
+ isPartTime=1
+ isFullTime=2
+ empRatePerHr=20
+ randomCheck=0
+ '[' 2 -eq 0 ']'
+ '[' 1 -eq 0 ']'
+ empHrs=0
+ salary=0
```

Selection Practice Problems with if, elif and else

1. Read a single digit number and write the number in word
2. Read a Number and Display the week day (Sunday, Monday,…)
3. Read a Number 1, 10, 100, 1000, etc and display unit, ten, hundred,…
4. Enter 3 Numbers do following arithmetic operation and find the one that is maximum and minimum
    1. a + b * c
    2. a % b + c
    3. c + a / b
    4. a * b + c

Thank You