

Programming
Constructs –
case 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





```
case expression in
  pattern1)
    statements;;
  pattern2)
    statements ;;
esac
```

case statements

```
#!/bin/bash
for filename in $(ls)
do
   # Take extension available in a filename
   ext=${filename##*\.}
   case "$ext" in
      java) echo "$filename : Java source file"
            ;;
      0)
            echo "$filename : Object file"
            echo "$filename : Shell script"
      sh)
            echo "$filename : Text file"
      txt)
           echo " $filename : Not processed"
      *)
            ;;
   esac
done
```

```
Narayans-MacBook-Pro:test narayan$ ./casefiletype.sh
Helloworld.java : Java source file
abc.txt : Text file
casefiletype.sh : Shell script
hello.sh : Shell script
```



Solving using Case Statement

Employee Wage using Case Statement

```
#!/bin/bash -x
isPartTime=1;
isFullTime=2;
empRatePerHr=20;
empCheck=$((RANDOM%3));
case $empCheck in
        $isFullTime)
                empHrs=8
        $isPartTime)
                empHrs=4
        *)
        empHrs=0
esac
salary=$(($empHrs*$empRatePerHr));
empWageCase.sh (END)
```

```
+ isPartTime=1
+ isFullTime=2
 empRatePerHr=20
 empCheck=0
 case $empCheck in
  empHrs=0
  salary=0
```

Compare if & Case Execution Statement

If Execution

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

Case Execution

```
+ isPartTime=1
+ isFullTime=2
+ empRatePerHr=20
+ empCheck=0
+ case $empCheck in
+ empHrs=0
+ salary=0
```

Selection Practice Problems with case stattement



- 1. Read a single digit number and write the number in word using Case
- 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. Write a program that takes User Inputs and does Unit Conversion of different Length units
 - 1. Feet to Inch

3. Inch to Feet

2. Feet to Meter

4. Meter to Feet



Thank You