case esac

```
#!/bin/bash

read INPUT_STRING
  case $INPUT_STRING  in
        hello)
                echo "Hello yourself!"
                ;;
        bye)
                echo "See you again!"
                        ;;
        *)
                echo "Sorry, I don't understand"
                ;;
  esac
```

for loop

(Method 1)

for var in list

do

.

.

done

```
For a in 1 2 3 4 5
do
echo “$a”
done
```

for loop

- Method 2

```
for((i=0;i<5;i++)
    do
     …
   done
```

```
for (( i=0; i<5; i++))
do
echo “$i”
done
```

for loops

- Typically used with positional parameters or a list of files:

positional parameters

```
sum=0
for var in "$@"
do
   sum=`expr $sum + $var`
done
echo The sum is $sum
```

List of file

```
for file in *.txt
Do
 echo "We have $file"
done
```

- **$@** refers to all of a **shell** script's command-line arguments
- A positional parameter is a variable within a shell program;
- its value is set from an argument specified on the command line that invokes the program.
- Positional parameters are numbered and are referred to with a preceding ``$": **$1**, **$2**, **$3**, and so on.

Positional parameter

```
echo  The first positional parameter is: $1
echo  The second positional parameter is: $2
echo  The third positional parameter is: $3
echo  The fourth positional parameter is: $4
```

```
pp one two three four
  The first positional parameter is: one
  The second positional parameter is: two
  The third positional parameter is: three
  The fourth positional parameter is: four
```

If a shell program is invoked with a command line that appears like this:

shell.prog pp1 pp2 pp3 pp4 pp5 pp6 pp7 pp8 pp9

positional parameter **$1** within the program is assigned the value **pp1**, positional parameter **$2** within the program is assigned the value **pp2**, and so on, at the time the shell program is invoked.

``$#''

This parameter, when referenced in a shell program, contains the number of arguments with which the shell program was invoked. Its value can be used anywhere in the shell program.