

## TCL (Tool Command Language)

### Small Examples :

#### Displaying messages and values

```
puts India
o/p:India
puts "welcome to India"
o/p:welcome to India
puts 58
o/p:58
echo welcome to India
welcome to India
```

#### Putting Comments

```
#this is comment
```

#### Displaying values of variables

```
set x 10
o/p:10
puts $x
o/p:10
```

```
set string "welcome to India"
o/p:welcome to India
puts $string
o/p:welcome to India
```

```
puts hai ; puts bye
o/p:
hai
bye
```

```
set i hai ; set x 5 ; puts "$i $x"
o/p:hai 5
```

```
set a 10.00 ; puts "I have $a rupees"
o/p:I have 10.00 rupees
```

```
set i hai ; set x 5 ; puts "$i \ $x"
o/p:hai $x
```

```
puts {hai bye}
o/p:hai bye
```

```
set i 5
expr { $i<10 ? ($i+10) : ($i-10) }
o/p:15
set i [expr {$i+1} ]
o/p:6
```

### **1.if else statment**

```
set i 10
o/p:10
if { $i!=10 } { puts "i value is not 10" } else {
> puts "i value is 10" }
o/p:i value is 10
```

```
if { $x==10 } { puts "x value is $x" } else { puts "x value is not $x" }
o/p:x value is 10
```

### **2.New Line and Tab**

```
puts "welcome to \n new line"
o/p :welcome to
new line
puts "welcome to \t tab"
o/p :welcome to      tab
```

### **3.expr**

```
expr {2==2}
o/p :1
expr {1==2}
o/p :0
```

### **4.arrays**

```
set a(0) 56
o/p :56
set a(3) 78
o/p :78
puts $a(0)
o/p :56
puts $a(3)
o/p :78
```

### **5.For loop**

```
for {set i 0} {$i<5} {incr i} {
```

```
> puts "welcome $i"
> }
o/p :
welcome 0
welcome 1
welcome 2
welcome 3
welcome 4
```

### **6.arrays and for loop**

```
set a(0) 123
o/p :123
set a(1) 234
o/p :234
set a(2) 345
o/p :345
for {set i 0} {$i<3} { incr i} {
> puts "use of arrays in tcl"
> puts $a($i)
> }
o/p :
use of arrays in tcl
123
use of arrays in tcl
234
use of arrays in tcl
345
```

### **7.when we use '['**

```
i)
set i 10
o/p :10
set i [set j 20]
o/p :20
puts $i
o/p :20
ii)
set i 10
o/p :10
set i [expr {$i+1}]
o/p :11
puts $i
o/p :11
```

### **8.While Loop :**

```
set i 5
```

```
while {$i<8} {
puts "i is $i"
set i [ expr{$i+1} ] }
o/p:
i is 5
i is 6
i is 7
```

### **9.Switch statement :**

```
set i 1
set j 2
set k 3
switch $j { 1 { puts "This is $i" } 2 { puts "This is $j" } 3 { This is $k } }
o/p:
This is 2
```

### **10.How to write a function**

```
proc add {i j} {
set sum [expr {$i+$j}]
return $sum
}
add 2 5
o/p:7
puts "The returned value is [add 12 34]"
o/p:The returned value is 46
```

### **11.Checking the arguments in the function call**

```
proc function { a b {c ""} d} {
if {$a eq ""} { puts "a value is not given" } else {
puts "all arguments are given" }
return "arguments"
}
function 23 34 45 56
o/p:all arguments are given
arguments
```

### **12.File open and read**

```
set count 1
o/p:1
set fptr [open "test.txt" r]
while {[gets $fptr line] >= 0} { puts "line $count---$line"
incr count
}
o/p:
line 1---1234
```

line 2---2345

line 3---3456

### **13.Time and Date**

```
puts "Now the time is: [clock format [clock seconds] -format %H:%M:%S]"
```

```
o/p:Now the time is: 15:28:05
```

```
puts "The date is: [clock format [clock seconds] -format %D]"
```

```
o/p:The date is: 11/01/2009
```

For tcl download please visit

<http://tcl.tk/>

and for more tutorial please visit

<http://www.tcl.tk/man/tcl/tutorial/tcltutorial.html>