Assignment-6

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Write a tcl-tk script to produce a pie chart for COVID19 INDIA and divide the states in three zones: red zone, orange zone and green zone according to the number of confirmed cases.

Code:

```
wm title . "Covid 19 DataSet : Confirmed Cases"
proc piechart {w x y width height data} {
  set coords [list $x $y [expr {$x+$width}] [expr {$y+$height}]]
  set xm [expr {$x+$width/2.}]
  set ym [expr {$y+$height/2.}]
  set rad [expr {$width/2.+20}]
  set sum 0
  foreach item $data {set sum [expr {$sum + [lindex $item 1]}]}
  set start 270
  foreach item $data {
     foreach {name n color} $item break
    set extent [expr {$n*360./$sum}]
    $w create arc $coords -start $start -extent $extent -fill $color
    set angle [expr {($start-90+$extent/2)/180.*acos(-1)}]
    set tx [expr $xm-$rad*sin($angle)]
    set ty [expr $ym-$rad*cos($angle)]
    $w create text $tx $ty -text $name:$n -tag txt
    set start [expr $start+$extent]
  $w raise txt
#-- Testing:
pack [canvas .c -bg white]
piechart .c 100 50 150 150 {
  {"Red zone" 6083 red}
  {"Orange zone" 4323 orange}
  {"Green Zone" 347 green}
```

