

ກສຸມຂອງຕົວແປຣ (Groups of Variable)



- Global variable
 - def setparams(name, surname, weight, height):
 - global namelst
 - namelst = (name + surname, weight, height)
 - return namelst
- Local variable & Parameters
 - def plus(par1 par2):
 - res = par1 + par2
 - return res
 - *Parameters គឺជា par1 និង par2*
 - *Local variables គឺជា res*
- ສັນຍາກລັບດ້ວຍ return

Functions: Example



- # Convert points array to list


```
def pts2pnts(pts):
    pnts = ()                      # init. tuple
    for p in pts:
        pnts = pnts + p            # Add tuples
    return list(pnts)              # Convert to List
```
- # Create polyline


```
def make_pline(pts, lay):
    plineObj = ms.AddPolyline(vtFloat(pts2pnts(pts)))
    if not layerexist(lay):
        doc.Layers.Add(lay)
    plineObj.Layer = lay
    return plineObj
```
- pts = getpts('Pick polyline point')


```
if len(pts)>1:
    plObj = make_pline(pts, lay1)
```

Example (2)



```

• # Distance function by giving 2D point1, point2
def distance(p, q):
    dx = p[0] - q[0]
    dy = p[1] - q[1]
    return math.sqrt((math.pow(dx, 2) + math.pow(dy, 2)))

• # Angle function by giving 2D point1, point2
def angle(p, q):
    dx = q[0] - p[0]
    dy = q[1] - p[1]
    return math.atan2(dy, dx)

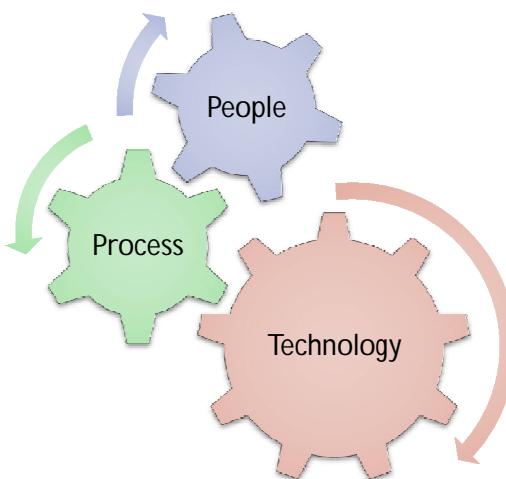
• # Create circle
def make_circle(pt, r, lay):
    circleObj = ms.AddCircle(pt_vtp(pt), r)
    if not layerexist(lay):
        doc.Layers.Add(lay)
    circleObj.Layer = lay

• # Create Text
def ptxt(txt, pt, ht, lay):
    textObj = ms.AddText(txt, pt_vtp(pt), ht)
    if not layerexist(lay):
        doc.Layers.Add(lay)
    textObj.Layer = lay
    return textObj

• make_line(p1, p2, lay1)
make_line(p1, p3, lay1)
ptxt(tx12, p1, 25, lay1)
make_line(p2, p3, lay1)
make_circle(p2, r2, '0')
make_circle(p3, r3, '0')

```

คน - กระบวนการ - เทคโนโลยี (People - Process - Technology)

The diagram illustrates the interconnected nature of People, Process, and Technology. Three interlocking gears are shown in different colors: blue for People, green for Process, and red for Technology. Each gear has a curved arrow pointing clockwise around its perimeter, symbolizing a continuous cycle or process.

