

exerceice 1

```
lesPrix = {'perceuse':60,'ampoule':3.5,'clous':1.99,'vis':2.20}
leStock = {'perceuse':15,'ampoule':75,'vis':300,'clous':400}
```

```
def informationsStocks(p = lesPrix, s = leStock):
    nb_total_art = 0
    prix_tot = 0
    prix_moyen = 0
    for k, v in s.items():
        if k not in p:
            p[k] = 1
        nb_total_art += v
        prix_tot += v * p[k]
    prix_moyen = prix_tot / nb_total_art
    return prix_tot, nb_total_art, prix_moyen
```

exercice 2

```
lesDepts = {'quincaillerie':leStock,'outillage':{'perceuse':5,'visseuse':8}}
```

```
def infoDepts(d = lesDepts, p = lesPrix):
    info = {}
    for k, v in d.items():
        info[k] = informationsStocks(p, v)
    return info
```

exercice 3

```
def indexArticles(d = lesDepts):
    info = {}
    for z, v in d.items():
        for a, f in v.items():
            info[a] = z
    return info
```