

In [2]:

```
1 # 1
2
3 def next_in_line(l,d):
4     if len(l)==0:
5         print("No list has been selected")
6     else:
7         l.append(d)
8         l.remove(l[0])
9         print(l)
10
11 next_in_line([5, 6, 7, 8, 9], 1)
12 next_in_line([7, 6, 3, 23, 17], 10)
13 next_in_line([1, 10, 20, 42 ], 6)
14 next_in_line([], 6)
```

[6, 7, 8, 9, 1]

[6, 3, 23, 17, 10]

[10, 20, 42, 6]

No list has been selected

In [3]:

```
1 # 2
2
3 def get_budgets(l):
4     k=0
5     for i in l:
6         k+=i["budget"]
7     print(k)
8
9 get_budgets([
10 { "name": "John", "age": 21, "budget": 23000 },
11 { "name": "Steve", "age": 32, "budget": 40000 },
12 { "name": "Martin", "age": 16, "budget": 2700 }])
13 get_budgets([
14 { "name": "John", "age": 21, "budget": 29000 },
15 { "name": "Steve", "age": 32, "budget": 32000 },
16 { "name": "Martin", "age": 16, "budget": 1600 }
17 ])
```

65700

62600

In [13]:

```
1 # 3
2
3 def alphabet_soup(s):
4     l=[]
5     for i in s:
6         l.append(int(ord(i)))
7     l.sort()
8
9     k=''
10    for i in l:
11        k+=chr(i)
12
13    print(k)
14
15
16
17
18 alphabet_soup("hello")
19 alphabet_soup("edabit")
20 alphabet_soup("hacker")
21 alphabet_soup("geek")
22 alphabet_soup("javascript")
```

ehllo  
abdeit  
acehkr  
eegk  
aacijprstv

In [17]:

```
1 # 4
2
3
4 def compound_interest(p,t,r,n):
5     total_time=t*n
6     rate=r/n
7
8     print(round((p*(1+rate)**total_time),2))
9
10
11 compound_interest(10000, 10, 0.06, 12)
12 compound_interest(100, 1, 0.05, 1)
13 compound_interest(3500, 15, 0.1, 4)
14 compound_interest(100000, 20, 0.15, 365)
15
```

18193.97  
105.0  
15399.26  
2007316.26

In [18]:

```
1 # 5
2
3
4 def return_only_integer(l):
5     k=[i for i in l if type(i)==int]
6     print(k)
7
8
9
10
11
12 return_only_integer([9, 2, "space", "car", "lion", 16])
13 return_only_integer(["hello", 81, "basketball", 123, "fox"])
14 return_only_integer([10, "121", 56, 20, "car", 3, "lion"])
15 return_only_integer(["String", True, 3.3, 1])
```

[9, 2, 16]

[81, 123]

[10, 56, 20, 3]

[1]