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Business analytics HW

In [20]:

```
#For loop

balance = 0
deposit = 20500

age = 22
retire_age = 65
years_to_retirement = retire_age - age

rate = 13.5
real_rate = rate*0.01

i = 0

for year in range(years_to_retirement):
    balance = (balance + deposit)*(1 + real_rate)
    i += 1
print(balance, i)
print("At retirement age, I will have ${}".format(balance))

```

```
39752011.53604165 43
At retirement age, I will have $39752011.53604165
```

In [21]:

```
#While loop

balance = 0
deposit = 20500

age = 22

rate = 13.5
real_rate = rate*0.01

retirement_value = 35000000
while balance < retirement_value:
    balance = (balance + deposit)*(1 + real_rate)
    age += 1

print("I will have {} at {} years old.".format(balance, age))
```

```
I will have 35003298.71016885 at 64 years old.
```