## **Problem 2**

## **Black Jack**

```
In [1]:
```

```
import numpy as np

def GetCard():
    '''generate rand num 0~10'''
    return np.random.randint(0,10)
```

In [2]:

```
def BlackJack():
   '''BlackJack - Make number closet to 21'''
   USER = 0
   BOT = 0
   KEEP = 0
   while KEEP == 0:
       USER += GetCard()
       BOTCARD = GetCard()
       if BOT + BOTCARD <= 21:
           BOT += BOTCARD
       if USER > 21:
            print(USER,'was over than 21.. You lose')
            break
       print('Your sum: ',USER)
       print('0: Draw, 1: Not')
       KEEP = int(input()) # User's decision: Keep getting card
    if USER > BOT and USER <= 21:</pre>
       if USER == 21:
           print("BLACKJACK! YOU WIN!")
          print("YOU WIN! - YOU:", USER, "BOT:", BOT)
    elif USER == BOT and USER <= 21:</pre>
       print("DRAW!")
    else:
       print("You lose.. - YOU:", USER, "BOT:", BOT)
```

## In [3]:

```
BlackJack()

Your sum: 3
0: Draw, 1: Not
0
Your sum: 11
0: Draw, 1: Not
0
Your sum: 15
0: Draw, 1: Not
0
24 was over than 21.. You lose
You lose.. - YOU: 24 BOT: 16
```