In [1]:
```
#1. Write a function to check whether a number falls in a given range
def test_range_check(n):
    if n in range(1,101):
        print(" %s is in the range"%str(n))
    else :
        print(" %s is in outside the given range"%str(n))
test_range_check(101)
```

```
 101 is in outside the given range
```

In [2]:
```
#2.
num_cards = eval(input('How many cards do you have? '))
print('After reducing, you now have:', num_cards // 2)
```

```
How many cards do you have? 4
After reducing, you now have: 2
```

In [3]:
```
#3.
from random import randint

num = eval(input('Enter a positive integer: '))

num_times = randint(num, num+10)

for i in range(num_times):
    print('A', end='')
print()
```

```
Enter a positive integer: 7
AAAAAAAAAAAAAAA
```

In [4]:
```
#4
start = eval(input('Enter starting hour (0-23): '))
end = eval(input('Enter ending hour (0-23): '))
if end >= start:
    print('Total: ', (end-start)*5.50)
else:
    print('Total: ', (24-start + end)*5.50)
```

```
Enter starting hour (0-23): 20
Enter ending hour (0-23): 12
Total:  88.0
```

In [5]:
```
# 5.
from random import randint

count = 0
for i in range(10000):
    r1 = randint(1, 6)
    r2 = randint(1, 6)
    if r1 == r2:
        count += 1
print('Percentage of doubles:', 100*count/10000)
```

```
Percentage of doubles: 16.87
```

In [ ]:
```

```