In [9]:
```
#defining a function to find if the number exists in the given range
def check_num(i, j):
    if j in range(i):
        return(print("\n the number exists in the given range"))
    else:
        return(print("\n the number doesnot exists in the given range"))
#taking user input
i = int(input("Enter the range: "))
j = int(input("enter the number to search: "))
check_num(i,j)
```

```
Enter the range: 10
enter the number to search: 1

 the number exists in the given range
```

In [13]:
```
i = int(input("enter the number of cards in your hand: "))
j = i//2
print("Under the given rule your hand would reduce to: ",j)
```

```
enter the number of cards in your hand: 11
Under the given rule your hand would reduce to:  5
```

In [24]:
```
#importing Random module
import random
#taking user input
i = int(input("Enter a positive number: "))

#checking if user input is positive and printing the output
if(i>0):
    for i in range(random.randrange(i,i+10)):
        print('A',end=" ")
else:
    print("Entered number is not positive")
```

```
Enter a positive number: 4
A A A A A A A A A A A
```

In [26]:
```
start = int(input("enter starting hour in 24 hr format: "))
end = int(input("Enter ending hour in 24 hr format: "))
if end >= start:
    fee = (end - start)*5.50
    print("Your total bill is: ", fee)
```

```
enter starting hour in 24 hr format: 10
Enter ending hour in 24 hr format: 20
Your total bill is:  55.0
```

In [37]:
```
from random import randint
c=0
for i in range(10000):
    d1 = randint(1, 6)
    d2 = randint(1, 6)
    if(d1 == d2):
        c += 1
print("percentage of rolling doubles in 10000 rolls is: ", 100*c/10000)
```

```
percentage of rolling doubles in 10000 rolls is:  16.92
```