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1.def num_inrange(a,b):
    number = int(input('Enter a number : '))
    if number in range(a,b):
        return(print(number, 'is present in the range.'))
    else:
        return(print(number, 'is not present in the range.'))
num_inrange(1,10)

2.num=int(input("enter no.of cards"))
x=int(num/2)
print("number of cards in hand are",x)

3.import random
x=int(input("enter a number"))
if x >=0:
    y=random.randint(x,x+10)
    a='A'
    print(a*y,end=" ")
else :
    print("please enter a positive integer")

4.
x=int(input('please enter the starting hour'))
y=int(input('please enter the ending hour'))
if x > 24 or y > 24 :
    print("please give time within 24 hours not more than that")
elif y > x and y-x !=24:
    total_bill=(y-x)*5.5
    print("total bill for the service is $",total_bill)
elif x > y and x-y !=24:
    total_bill = (y+24-x) * 5.5
    print("total bill for the service is $",total_bill)
elif x-y== 24 or y-x==24:
    print("Service is available only for 23 hrs not more than that")
else :
    print("Service is available atleast per 1 hour not less than that")

5.import random
count=0
total_per=0
for i in range(10000):
    x=random.randint(1,6)
    y=random.randint(1,6)
    if x == y :
        count=count+1
    total_per = round((count / 10000 ) * 100,2)
print("Total Probability of same occurence is ",total_per)

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