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# In[1]:


# 1) Write a function to check whether a number falls in a given range
def the_range(n):
    if n in range(2,8):
        print(" %s is in the given range"%str(n))
    else :
        print( " %s is outside the given range."%str(n))
the_range(9)


# In[2]:


# 2) Reducing the number of cards holding by half, rounded down

cards1=int(input("Enter number of cards in your hand :"))
#we need to cut the number into half so
number1 = (2)
result=cards1//number1
print(result,",is the result")


# In[4]:


# 3) Print 'A' as many times as the generated number
import random

inputnumber1=int(input("Enter a positive number:"))
inputnumbernumber2=inputnumber1+(10)
inputnumber3= random.randint(inputnumber1, inputnumbernumber2)
print("Generated number is :",inputnumber3)
print("A "*inputnumber3)


# In[5]:


# 4) Billing program
hrs1= float((input("Enter starting time in 24 hour time :")))
minhrs = 1
maxhrs = 2

if hrs1 < minhrs:
    print(float(input("Enter a valid number between 1 - 23 :")))
else :
    hrs2= float(input("Enter ending time :"))
    if hrs2 < maxhrs:
        print(float(input("Enter a valid time between 1 - 23 :")))
    else :
        total_hours= float(hrs2 - hrs1)

cost_per_hour = 5.50
total_user_bill = float(total_hours * cost_per_hour)
print("your total bill is :  $", total_user_bill,)


# In[6]:


count = 0
import random
for n in range(10000):

    dice1 = random.randint(1,6)
    dice2 = random.randint(1,6)
    if dice1==dice2:
        count +=1
percent=(count/10000)*100
print(f"The persentage of getting doubles is : {percent}%")


# In[ ]:
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