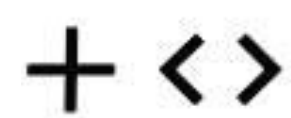




## Question 1



Connect



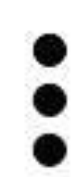
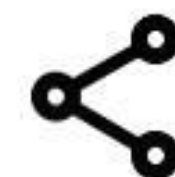
```
year=int(input("Enter the year"))
if year%12==0:
    print("monkey")
elif year%12==1:
    print("rooster")
elif year%12==2:
    print("dog")
elif year%12==3:
    print("pig")
elif year%12==4:
    print("rat")
elif year%12==5:
    print("ox")
elif year%12==6:
    print("rabbit")
elif year%12==7:
    print("tiger")
elif year%12==8:
    print("dragon")
elif year%12==9:
    print("snake")
elif year%12==10:
    print("horse")
else:
    print("sheep")
```

1



Enter the year2012  
dragon





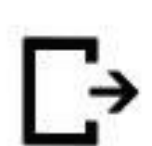
RAM



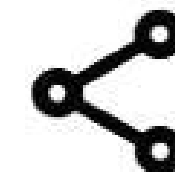
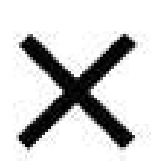
Disk



```
d=int(input("Distance to be travel])
w=int(input("weight of the goods :")
if d>=500:
    if w>=100:
        Amount = 5*distance
        print("Amount to be charged :
elif w>=10 or w<100:
    Amount =6*d
    print("Amount to be charged
elif d<500 :
    if w>=100 :
        Amount =8*d
        print("Amount to be charged
elif w<100 :
    Amount =5*d
    print("Amount to be charged
else:
    print("invalid")
```



```
Distance to be travelled :520
weight of the goods :50
Amount to be charged : 3120
```



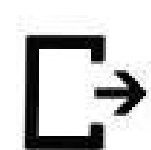
+ <> +

Connect



```
T=input("Type of seat:")
p=input("Payment mode:")
if T=="stall":
    cot=625
elif T=="circle":
    cot=750
elif T=="upper class":
    cot=850
elif T=="Box":
    cot=1000
else:
    print("invalid")
if p=='cash':
    cot=(cot-(cot*10)//100)
else:
    cot=(cot-(cot*5)//100)
print("cost of ticket :",cot)
```

3



```
Type of seat:circle
Payment mode:cash
cost of ticket : 675
```



```
M=float(input("Enter the amount of kilograms :"))
initialTemperature=float(input("Enter initialTemperature of water in degree Celsius :"))
finalTemperature=float(input("Enter final Temperature of water in degree Celsius :"))
Q=M*(finalTemperature-initialTemperature)*4184
print(f'Energy required to heat the water = {Q}joules')
```

```
Enter the amount of kilograms :20
Enter initialTemperature of water in degree Celsius :6
Enter final Temperature of water in degree Celsius :8
Energy required to heat the water = 167360.0joules
```

4

```
▶ month=input("Enter month name:")  
if month=="December" or month=="January" or month=="February":  
    print("Winter")  
elif month=="March" or month=="April" or month=="May":  
    print("Spring")  
elif month=="June" or month=="July" or month=="August":  
    print("Summer")  
else:  
    print("Autumn")
```

5

📄 Enter month name: July  
Summer





## Question 6 - Colaboratory

<https://colab.research.google.com>



+ <> +

Connect





```
wt=int(input("Enter weight in pounds-->"))
h=int(input("Enter height in inches-->"))
wt_kg=float(wt*0.45359237) #converting to pounds
h_m=float(h*0.0254 )#converting to metre
bmi=float(wt_kg/h_m**2)
if bmi>30:
    print("Obese")
elif 25.0<=bmi<30.0:
    print("Over weight")
elif 18.5<=bmi<25.0:
    print("Normal")
else:
    print("Under weight")
```

6

```
else:  
    print("Under weight")
```


```
Enter weight in pounds-->100  
Enter height in inches-->20  
Obese
```

6

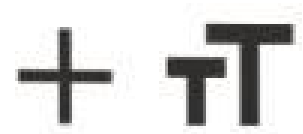
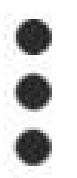
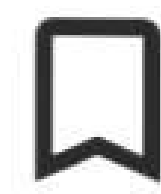
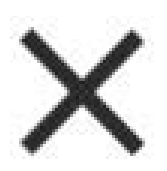
 

```
n=int(input("Enter an integer between 100 and 1000"))  
sum=0  
while(n>0):  
    r=n%10  
    n=n//10  
    sum=sum+r  
print(sum)
```

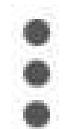
7

 Enter an integer between 100 and 1000  
1





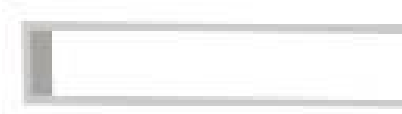
Connect



```
for n in range (1,1000):  
    temp=n  
    sum=0  
    while n>0:  
        R=n%10  
        sum=sum*10+R  
        n=n//10  
    if sum==temp:  
        print(sum,end=" ")
```



RAM



Disk



```
for n in range (1,1000):
```

```
    sum=0
```

```
    temp=n
```

```
    while n>0:
```

```
        R=n%10
```

```
        n=n//10
```

```
        sum+=R*R*R
```

```
    if sum==temp:
```

```
        print(temp,end=" ")
```

9



```
1 153 370 371 407
```





+ <> +

Connect



```
for i in range(1,101):  
    if i%3==0 and i%5==0:  
        print("fizz buzz")  
    elif i % 3==0:  
        print("Fizz")  
    elif i % 5==0:  
        print("Buzz")  
    else:  
        print(i)
```

10



```
1  
2  
Fizz  
4  
Buzz  
Fizz  
7  
8  
Fizz  
Buzz  
11  
Fizz  
13  
14  
fizz buzz  
16  
17  
Fizz  
19  
Buzz  
Fizz  
22  
23  
Fizz  
Buzz  
26  
Fi??
```



Question 11 - Colaboratory

<https://colab.research.google.com>



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Connect



```
H=int(input("Enter height of the well:"))
U=int(input("Enter the meters which is climbed:"))
D=int(input("Slips down:"))
step=((H-U)+(U-D))/(U-D)
print(step+1)
```



```
Enter height of the well:100
Enter the meters which is climbed:20
Slips down:1
6
```

11