

```

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

```

```

☞ enter the year2012
   dragon

```

```

dist=int(input("enter the distance"))
weight=int(input("enter the weight"))
if dist>=500:
    if weight>=100:
        amount=dist*5
    elif weight>=10 and weight<100:
        amount=dist*6
    else:
        amount=dist*7
else:
    if weight>=100:
        amount=dist*8
    else:
        amount=dist*5
print("total amount = ",amount)

```

```

☞ enter the distance510
   enter the weight120
   total amount = 2550

```

```

type=["circle","stalls","upperclass"]
payment=["cash","card"]
seat=input("enter the type of seat :: ")
pmode=input("enter the type of payment mode :: ")

```

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if seat in type[0]:
    if pmode in payment[0]:
        discnt=750*10/100
        cost=750-discnt
    elif pmode in payment[1]:
        discnt = 750 * 5 / 100
        cost = 750 - discnt
    else:
        print("error while entering payment mode")
elif seat in type[1]:
    if pmode in payment[0]:
        discnt = 650 * 10 / 100
        cost = 650 - discnt
    elif pmode in payment[1]:
        discnt = 650 * 5 / 100
        cost = 650 - discnt
    else:
        print("error while entering payment mode")
else:
    if pmode in payment[0]:
        discnt = 850 * 10 / 100
        cost = 850 - discnt
    elif pmode in payment[1]:
        discnt = 850 * 5 / 100
        cost = 850 - discnt
    else:
        print("error while entering payment mode")
print("cost of ticket  :: ",cost)

```

```

☞ enter the type of seat :: 3
   enter the type of payment mode :: card
   cost of ticket  ::  807.5

```

```

water=int(input("enter weight of water in kilograms :: "))
intemp=int(input("enter initial temparature :: "))
fitemp=int(input("enter the final temperature :: "))
energy=water*(fitemp-intemp)*4184
print("enery required :: ",energy,"joules")

```

```

☞ enter weight of water in kilograms :: 2
   enter initial temparature :: 36
   enter the final temperature :: 45
   enery required ::  75312 joules

```

```

winter=["december","january","february"]
spring=["march","april","may"]
summer=["june","july","august"]
autumn=["september","october","november"]
month=input("enter the month :: ")
if month in winter:
    print("it is a winter season")
elif month in spring:
    print("it is a spring")
elif month in summer:
    print("it is a summer")

```

```
else:
    print("it is a autumn")
```

```
➤ enter the month :: june
    it is a summer
```

```
weight=int(input("enter the weight in pounds"))
height=float(input("enter the height in inches"))
w=(weight*0.45359237)
print(w)
h=(height*0.0254)
print(h)
BMI=w/(h**2)
print(BMI)
if BMI<18.5:
    print("underweight")
if BMI>=18.5 and BMI<25.0:
    print("normal")
if BMI>=25.0 and BMI<30.0:
    print("overweight")
if BMI>30.0:
    print("obese")
```

```
➤ enter the weight in pounds20
    enter the height in inches10
    9.0718474000000001
    0.254
    140.61391592783187
    obese
```

```
num=int(input("enter a number between 100 and 1000 :: "))
rem=0
sum=0
if(num>100 and num<1000):
    while num>0:
        rem=num%10
        sum=sum+rem
        num=num//10
    print(sum)
else:
    print("the number entered is not in the range")
```

```
➤ enter a number between 100 and 1000 :: 544
    13
```

```
rem=0
for i in range(1,1000):
    n=i
    rev=0
    while n>0:
        rem=n%10
        rev=rev*10+rem
        n=n//10
    if i==rev:
        print(i)
```



1  
2  
3  
4  
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7  
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9  
11  
22  
33  
44  
55  
66  
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878  
888  
898  
909  
919  
929  
939  
949  
959  
969  
979  
989  
999

```
rem=0  
for i in range(1,1000):
```

```
n=i
rev=0
while n>0:
    rem=n%10
    rev=rev+rem**3
    n=n//10
if i==rev:
    print(i)
```

☞ 1  
153  
370  
371  
407

```
for i in range(1,100):
    if i%3==0 and i%5==0:
        print("fizz buzz")
    elif i%3==0:
        print("fizz")
    elif i%5==0:
        print("buzz")
```

☞

```
fizz
buzz
fizz
fizz
buzz
fizz
fizz buzz
fizz
buzz
fizz
fizz
buzz
fizz
```

```
h=int(input("enter height of the well :: "))
u=int(input("enter the meters spider climb up for each sstep :: "))
d=int(input("enter the meters the spider slips down for each step :: "))
s=0
t=0
p=0
while t<=h:
    t=t+u
    if(t<=h):
        t=t-d
    s=s+1
print(s)
```

