Qn1:-sum of digit until sum becomes single. Digit

```
num = int(input("Enter a number: "))

while num >= 10:
    sum_digits = 0
    while num > 0:
        sum_digits += num % 10
        num //= 10
    num = sum_digits

print("The single-digit sum is:", num)
```

Qn3:- spy number

```
num=int(input(“enter number”)
sum=0
prod=1
temp=num
while num>0
     digit=num%10
     sum+=r
     prod*=r
     Num//=10
If sum==prod:
   print(“its a spy number”)
else:
   print(“no its not a spy number”)
```

Qn4:- strong number

```
n=int(input("enter a number"))
temp=n

sum=0
while n!=0:
    digit=n%10
    fact=1
    print(digit)
    while digit>1:
        fact=fact*digit
        print(fact)
        digit=digit-1
    sum=sum+fact
    n=n//10
print(sum)
if temp==sum:
    print("yes its a strong")
else:
    print("noo its not")
```