 # 1)WAP ask the user print the square of the numbers from 1 to 5

In [ ]:
```
import math
i = 1
while i < 6:
   print(f"square of {i} is {math.pow(i, 2)}")
   i = i +1
```

```
square of 1 is 1.0
square of 2 is 4.0
square of 3 is 9.0
square of 4 is 16.0
square of 5 is 25.0
```

 # 2)WAP ask the user take 5 random numbers between 10 to 100 and print the square of the random numbers

In [ ]:
```
import math
import random

i = 1
while i < 6:
   num = random.randint(10, 100)
   print(f"square of {num} is {math.pow(num, 2)}")
   i = i +1
```

```
square of 12 is 144.0
square of 32 is 1024.0
square of 59 is 3481.0
square of 16 is 256.0
square of 84 is 7056.0
```

 # 3) Create a function on reuse code lines call that function inside the for loop

In [ ]:
```
import math
import random

def square_random_number():
    num = random.randint(10, 100)
    print(f"square of {num} is {math.pow(num, 2)}")


i = 1
while i < 6:
    square_random_number()
    i = i + 1
```

```
square of 64 is 4096.0
square of 71 is 5041.0
square of 66 is 4356.0
square of 53 is 2809.0
square of 86 is 7396.0
```

 # 4)wap ask the user print the even or odd values between 11 to 21

In [ ]:
```
i = 11
while i < 22:
    if(i % 2 == 0):
        print(f"{i} is an even number")
    else:
        print(f"{i} is an odd number")
    i = i + 1
```

```
11 is an odd number
12 is an even number
13 is an odd number
14 is an even number
15 is an odd number
16 is an even number
17 is an odd number
18 is an even number
19 is an odd number
20 is an even number
21 is an odd number
```

 # 5)wap ask the user enter a value from keyboard 5 times print that value is even or odd

In [ ]:
```
count = 0
while count < 5:
    i = eval(input("Enter a number: "))
    if(i % 2 == 0):
        print(f"{i} is an even number")
    else:
        print(f"{i} is an odd number")
    count = count + 1
```

```
5 is an odd number
6 is an even number
2 is an even number
5 is an odd number
9 is an odd number
```

#6)Wap to create 9th table

In [ ]:
```
count = 1
num = eval(input("Enter a number: "))
while count < 11:
    print(f"{num} X {count} = {num * count}")
    count = count + 1
```

```
9 X 1 = 9
9 X 2 = 18
9 X 3 = 27
9 X 4 = 36
9 X 5 = 45
9 X 6 = 54
9 X 7 = 63
9 X 8 = 72
9 X 9 = 81
9 X 10 = 90
```

#7Q) WAP to print the divisiors of number 50

In [ ]:
```
count = 1
while count <= 50:
    if(50 % count == 0):
        print(f"{count} is divisor of 50")
    count = count + 1
```

```
1 is divisor of 50
2 is divisor of 50
5 is divisor of 50
10 is divisor of 50
25 is divisor of 50
50 is divisor of 50
```

#Q8) WAP print the sum of first 10 natural numbers

In [ ]:
```
sum_value = 0
count = 1
while count <= 10:
    sum_value = sum_value + count
    count = count + 1

print(sum_value)
```

```
55
```

#9Q) How many divisors are availble for 50

In [ ]:
```
count = 1
divisor_count = 0
while count <= 50:
    if(50 % count == 0):
        divisor_count = divisor_count + 1
    count = count + 1

print(f"Total {divisor_count} divisors of 50")
```

```
Total 6 divisors of 50
```

In [ ]:
```
import random
def play():
    try:
        failure_count = 0
        while True:
            if failure_count == 5 :
                print("Account has blocked for 24 hrs")
                break
            num1 = eval(input("Enter a digit : "))
            num2 = random.randint(1,10)
            if num1 != num2:
                failure_count = failure_count + 1
                print(f"Lost with num1: {num1} & num2: {num2}, chances left {5 - failure_count}")
            else:
                print(f"Win with num1: {num1} & num2: {num2}")
                break;
    except Exception as ex:
        print(f"Error Occurred: {ex}")


play()
```

```
Lost with num1: 4 & num2: 8, chances left 4
Lost with num1: 5 & num2: 3, chances left 3
Lost with num1: 6 & num2: 10, chances left 2
Lost with num1: 3 & num2: 6, chances left 1
Lost with num1: 1 & num2: 5, chances left 0
Account has blocked for 24 hrs
```