

In []: A chocolate factory **is** packing chocolates into the sachets.
The chocolate packets here represent an array of N number of integer value
The task **is** to find the empty sachets(0) of chocolate **and** push it to the end

```
In [6]: L = [4,5,0,1.9,0,5,0]
L1 = []
L2 = []
for i in L:
    if (i == 0):
        L1.append(i)
    else:
        L2.append(i)
L3 = L2 + L1
print(L3)
```

[4, 5, 1.9, 5, 0, 0, 0]

In []: Find the given number **is** even **or** odd without using arithmetic operator.

```
In [7]: num = int(input("Enter The Value ="))
if num & 1:
    print("The given number is odd")
else:
    print("The given number is even")
```

Enter The Value =2
The given number is even

In []: Write a program to reverse a given number **with** excluding odd numbers.

```
In [8]: num = int(input("Enter a number: "))
reversed_num = 0

while num > 0:
    digit = num % 10
    reversed_num = reversed_num * 10 + digit
    num = num // 10

print(f"The reverse of the number is {reversed_num}")
```

Enter a number: 1234
The reverse of the number is 4321

```
In [ ]: Write a program to create a secured auto-password out of the given person d
        (Ex: First two letters from name, last three numbers of their phone number,
         middle letters in mail, reverse of first three letters).
        Input:

        name: Avinash
        Contact Number: 9701923501
        mail= avinash12@gmail.com
        Address: Vijayawada
```

```
In [9]: name = "Avinash"
        contact_number = "9701923501"
        mail = "avinash12@gmail.com"
        address = "Vijayawada"

        first_two_letters = name[:2]
        last_three_numbers = contact_number[-3:]
        middle_letters_mail = mail[4:8]
        reverse_first_three = name[:3][::-1]

        password = first_two_letters + last_three_numbers + middle_letters_mail + r
        print(password)
```

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```
In [ ]: Write a program to print all the amstrong numbers provided range given by
```

In [13]:

```
start = int(input("Enter the start of the range: "))
end = int(input("Enter the end of the range: "))

if start > end:
    start, end = end, start

print(f"Armstrong numbers between {start} and {end} are:")

for num in range(start, end + 1):
    order = len(str(num))

    sum_of_powers = 0

    temp = num

    while temp > 0:
        digit = temp % 10
        sum_of_powers += digit ** order
        temp //= 10

    if num == sum_of_powers:
        print(num)
```

Enter the start of the range: 100
Enter the end of the range: 200
Armstrong numbers between 100 and 200 are:
153

In []:

After flipping a coin 10 times you got this result,
result = ["heads", "tails", "tails", "heads", "tails", "heads", "heads", "tails", "
Using for loop figure out how many times you got heads

In [14]:

```
result = ["heads", "tails", "tails", "heads", "tails", "heads", "heads", "t  
heads_count = 0

for flip in result:
    if flip == "heads":
        heads_count += 1

print("You got heads", heads_count, "times.")
```

You got heads 4 times.

In []:

Print square of all numbers between 1 to 10 except even numbers

```
In [15]: for number in range(1, 11):  
         if number % 2 != 0:  
             print(number ** 2)
```

```
1  
9  
25  
49  
81
```

In []: Your monthly expense list (from Jan to May) looks like this,
expense_list = [2340, 2500, 2100, 3100, 2980]
Write a program that asks you to enter an expense amount and program should

```
In [16]: expense_list = [2340, 2500, 2100, 3100, 2980]  
months = ["January", "February", "March", "April", "May"]  
  
expense = int(input("Enter the expense amount: "))  
found = False  
  
for i, monthly_expense in enumerate(expense_list):  
    if monthly_expense == expense:  
        found = True  
        print(f"The expense of {expense} occurred in {months[i]}")  
        break  
  
if not found:  
    print(f"The expense of {expense} was not found.")
```

```
Enter the expense amount: 2500  
The expense of 2500 occurred in February.
```

In []: Upon completing each 1 km asks you "are you tired?"
If you reply "yes" then it should break and print "you didn't finish the race"
If you reply "no" then it should continue and ask "are you tired" on every km
If you finish all 5 km then it should print congratulations message

```
In [17]: for km in range(1 , 6):  
          print(f"you have completed running {km} kilometer distance")  
          tired = input("Are you tired ? (yes/no): ")  
          if tired == "yes":  
              print("you didnt reach your distance")  
          else:  
              print("congratulations,you have successfully completed 5 kms running")
```

```
you have completed running 1 kilometer distance  
Are you tired ? (yes/no): no  
you have completed running 2 kilometer distance  
Are you tired ? (yes/no): no  
you have completed running 3 kilometer distance  
Are you tired ? (yes/no): no  
you have completed running 4 kilometer distance  
Are you tired ? (yes/no): no  
you have completed running 5 kilometer distance  
Are you tired ? (yes/no): no  
congratulations,you have successfully completed 5 kms running
```

```
In [ ]: Write a program that prints following shape
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```
*  
**  
***  
****  
*****
```

```
In [18]: for i in range(1 , 7):  
          print("*" * i)
```

```
*  
**  
***  
****  
*****  
*****
```

```
In [ ]:
```