

ADVANCED PYTHON

```
In [2]: if True: # indentation is always 4 spaces
        print('Data Science')
```

Data Science

```
In [4]: if True: # indentation is always 4 spaces
        print('Data Science')
        print('need to spend everyday 3-4hr')
```

Data Science

need to spend everyday 3-4hr

```
In [6]: if False: # indentation is always 4 spaces
        print('Data Science')

        print('good bye')
```

good bye

```
In [8]: if True: # indentation is always 4 spaces
        print('Data Science')

        print('good bye')
```

Data Science

good bye

```
In [10]: if True: # indentation is always 4 spaces
        print('Data Science')
        else:
        print('good bye')
```

Data Science

```
In [12]: if False: # indentation is always 4 spaces
        print('Data Science')
        else:
        print('good bye')
```

good bye

I want to print only even number

```
In [15]: x = 4
        r = x % 2

        if r == 0:
            print('Even number')
```

Even number

```
In [17]: x = 9
        r = x % 2

        if r == 0:
```

```
print('Even number')

if r == 1:
    print('odd number')
```

odd number

```
In [19]: x = 8
         r = x % 2

         if r == 0:
             print('Even number')
         else:
             print('odd number')
```

Even number

```
In [21]: x = 5
         r = x % 2

         if r == 0:
             print('Even number')
         print('odd number')
```

odd number

```
In [23]: x = 4
         r = x % 2

         if r == 0:
             print('Even number')
         print('odd number')
```

Even number

odd number

```
In [25]: x = 4
         r = x % 2

         if r == 0:
             print('Even number')
         else:
             print('odd number')
```

Even number

```
In [27]: x = 17
         r = x % 2

         if r == 0:
             print('Even number')

         if r != 0:
             print('odd number')
```

odd number

```
In [29]: x = 3
         r = x % 2

         if r == 0:
             print('Even number')
```

```

    if x>5:
        print('greater number')

else:
    print('Odd Number')

```

Odd Number

```

In [31]: x = 4
         r = x % 2

         if r == 0:
             print('Even number')
             if x>5:
                 print('greater number')

         else:
             print('Odd Number')

```

Even number

```

In [33]: x = 6
         r = x % 2

         if r == 0:
             print('Even number')
             if x>5:
                 print('greater number')

         else:
             print('Odd Number')

```

Even number

greater number

```

In [35]: x = 2
         r = x % 2

         if r == 0:
             print('Even number')

             if x>5:
                 print('greater number')
             else:
                 print('not greater')

         else:
             print('Odd Number')

```

Even number

not greater

```

In [37]: year = int(input("Enter a year: "))

         if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):
             print("Leap Year")
         else:
             print("Not a Leap Year")

```

Leap Year

In []: