

Advanced Python

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

Data Science

```
In [3]: if False:
        print('Data Science')
        print('bye for now')
```

bye for now

```
In [4]: if True:
        print('Data Science')
        print('bye for now')
```

Data Science

bye for now

```
In [5]: if True:
        print('Data Science')
        else:
        print('bye for now')
```

Data Science

```
In [6]: if False:
        print('Data Science')
        else:
        print('bye for now')
```

bye for now

Programs

```
In [8]: x = 4
        r = x % 2

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

Even number

```
In [9]: x = 5
        r = x % 2

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

```
In [10]: x = 5
        r = x % 2

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

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

odd number

```
In [11]: x = 4  
        r = x % 2  
  
        if r == 0:  
            print('Even number')  
  
        if r == 1:  
            print('odd number')
```

Even number

```
In [13]: x = 5  
        r = x % 2  
  
        if r == 0:  
            print('Even number')  
  
        if r != 0:  
            print('odd number')
```

odd number

```
In [14]: x = 5  
        r = x % 2  
  
        if r == 0:  
            print('Even number')  
        else:  
            print('odd number')
```

odd number

```
In [15]: x = 3  
        r = x % 2  
  
        if r == 0:  
            print(' Even number')  
            if x>5:  
                print('greater number')  
        else:  
            print('Odd Number')
```

Odd Number

```
In [17]: x = 3  
        r = x % 2  
  
        if r == 0:  
            print(' Even number')  
            if x>5:  
                print('greater number')  
        else:  
            print('Odd Number')
```

Odd Number

```
In [18]: x = 4
r = x % 2

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

    else:
        print('lesser number ')
else:
    print('Odd Number')
```

Even number
lesser number

```
In [19]: x = 6
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
greater number

```
In [20]: x = 5

if x == 1:
    print('one')

elif x == 2:
    print('Two')
elif x == 3:
    print('Three')
elif x == 4:
    print('four')

else:
    print('number not found')
```

number not found

In []: