

# Conditionals

Let us go through conditionals in Python. We typically use "if else" for conditionals. Let us perform a few tasks to understand how conditionals are developed.

☰ Contents

[Task 1](#)

[Task 2](#)

[Task 3](#)

Print to PDF ►

- Create a variable `i` with 5. Write a conditional to print whether `i` is even or odd.

```
i = 5
```

```
# Regular if else
if i % 2 == 0:
    print("even")
else:
    print("odd")
```

```
odd
```

```
# (cond) ? on_true : on_false
```

```
# on_true (cond) else on_false
```

```
# Ternary Operator (one liner)
print("even") if i % 2 == 0 else print("odd")
```

```
odd
```

- Improvise it to check if `i` is 0 and print zero

```
i = int(input("Enter an integer: "))
```

```
Enter an integer: 10
```

```
if i == 0:
    print(f"i is 0")
elif i % 2 == 0:
    print(f"{i} is even")
else:
    print(f"{i} is odd")
```

```
10 is even
```

- Object of type `None` is special object which represent nothing. At times we need to check against `None`.

```
n = None
print('Not None') if n else print(n)
```

```
None
```

```
i = int(input("Enter an integer: "))
```

```
Enter an integer: 10
```

```
if i:
    print('Not None')
else: print(n)
```

```
None
```

```
i = int(input("Enter an integer: "))
```

Enter an integer: 9

```
if not i % 2 == 0: print(f'{i} is odd')
```

9 is odd

- We can also perform boolean operations such as **boolean or** and **boolean and**.

## Task 1

Determine the category of the baby.

- Print **New Born or Infant** till 6 months.
- Print **Toddler** from 7 months to 18 months.
- Print **Grown up** from 19 months to 144 months.
- Print **Youth** from 145 months to 216 months

```
age = int(input('Enter age in months: '))
```

Enter age in months: 5

```
if age <= 6:
    print('New Born or Infant')
elif age > 6 and age <= 18:
    print('Toddler')
elif age > 18 and age <= 144:
    print('Grown up')
elif age > 144 and age <= 216:
    print('Youth')
else:
    print('Adult')
```

New Born or Infant

## Task 2

Check if the number is even or divisible by 3.

```
n = int(input('Enter integer: '))
```

Enter integer: 6

```
if n % 2 == 0 or n % 3 == 0:
    print(f'Number {n} is even or divisible by 3')
```

Number 6 is even or divisible by 3

## Task 3

Check if the number is even and divisible by 3

```
n = int(input('Enter integer: '))
```

Enter integer: 6

```
if n % 2 == 0 and n % 3 == 0:
    print(f'Number {n} is even and divisible by 3')
elif n % 3 == 0:
    print(f'Number {n} is divisible by 3 but not even')
elif n % 2 == 0:
    print(f'Number {n} is even but not divisible by 3')
```

Number 6 is even and divisible by 3

---

By Durga Gadiraju  
© Copyright ITVersity, Inc.