Conditional Statements

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1 Conditional Statements

- Decision Making
- if, else, elif

[9]:
```
age = int(input("Enter your age: "))
if age > 18:
    print("Yes you can vote")
else:
    print("No cannot vote")
```

```
Enter your age: -147
No cannot vote
```

[12]:
```
# even or odd
number = int(input())
if number % 2 == 0:
    print("Even")
else:
    print("Odd")
```

```
15
Odd
```

[13]:
```
# even or odd
number = int(input())
if number % 2 != 0:
    print("Odd")
else:
    print("Even")
```

```
17
Odd
```

1.1 Using logical ops in Conditionals

[15]:
```
a, b, c, d, e = map(int, input().split()) # pass marks 40
if a >= 40 and b >= 40 and c >= 40 and d >= 40 and e >= 40:
    print("Passed")
```

```
else:
    print("Failed")
```

```
90 90 90 90 25
Failed
```

[19]:
```
# character vowel or consonant
ch = input()
if ch == 'a' or ch == 'e' or ch == 'i' or ch == 'o' or  ch == 'u':
    print("Vowel")
else:
    print("Consonant")
```

```
z
Consonant
```

[ ]:
```
# membership operators
# it's going to check if an element is a member of an iterable
```

[20]:
```
"h" in "hello"
```

[20]: True

[21]:
```
"H" in "hello"
```

[21]: False

[22]:
```
lst = [10, 20, 30]
target = 10
target in lst
```

[22]: True

[23]:
```
lst = [10, 20, 30]
target = 100
target in lst
```

[23]: False

[27]:
```
# character vowel or consonant
ch = input()
if ch in "AEIOUaeiou":
    print("Vowel")
else:
    print("Consonant")
```

```
Z
Consonant
```

2 Multiway conditional check using elif

[33]:
```
# profit or loss
cp, sp = map(int, input().split())
if sp > cp:
    print("Profit")
elif sp < cp:
    print("Loss")
else:
    print("NPNL")
```

```
110 100
Loss
```

[34]:
```
# largest 2 distinct integers
a = int(input())
b = int(input())
if a > b:
    print(a)
else:
    print(b)
```

```
10
20
20
```

[36]:
```
# largest 3 distinct integers
a = int(input())
b = int(input())
c = int(input())
if a > b and a > c:
    print(a)
elif b > a and b > c:
    print(b)
else:
    print(c)
```

```
10
20
30
30
```

[37]:
```
# Turning a numeric grade into a character grade
# per >= 90 --> 'O'
# 80 <= per < 90 --> 'A'
# 70 <= per < 80 --> 'B'
# 60 <= per < 70 --> 'C'
# <60 --> 'D'
per = float(input())
```

```
if per >= 90:
    print('O')
elif per >= 80:
    print('A')
elif per >= 70:
    print('B')
elif per >= 60:
    print('C')
else:
    print('D')
```

```
75.6
B
```

[42]:
```
a = int(input())
match a:
    case 1:
        print("One")
    case 2:
        print("Two")
    case 3:
        print("Three")
    case 4:
        print("Four")
    case 5:
        print("Five")
    case 6:
        print("Six")
    case 7:
        print("Seven")
    case 8:
        print("Eight")
    case 9:
        print("Nine")
    case _:
        print("Invalid Input")
```

```
9
Nine
```