▾ Challenge 1: Print all numbers from 1 to N

```
i = 1

while i <= 3:
  if i == 3:
    print(i, end='')
  else:
    print(i, end=' ')
  # this line below run
  # for both if and else
  # cases
  i = i + 1
```

```
    1 2 3
```

▾ Special Assignment Operators

```
a = 3
a = a + 3
print(a)
```

```
    6
```

```
a = 6
a += 9
print(a)
```

```
    15
```

```
a = 6
a -= 9
print(a)
```

```
    -3
```

```
a = 6
a *= 9
print(a)
```

```
    54
```

```
a = 6
a /= 9
print(a)
```

```
    0.6666666666666666
```

```
print(6 / 9)
```

```
    0.6666666666666666
```

```
print(int(6/9))
```

```
    0
```

Integer division

```
print(6 // 9)
```

```
    0
```

```
print(3 // 2)
```

```
    1
```

```
print(3 / 2)
```

```
    1.5
```

```
print(5 // 2)
```

```
    2
```

```
print(5/3)
```

```
    1.6666666666666667
```

```
print(5 // 3)
```

```
    1
```

It rounds off to the nearest integer on the left side.

```
print(-5 // 2)
```

```
    -3
```

```
print(-3 // 2)
```

```
    -2
```

```
print(int(-3 / 2))
```

```
    -1
```

Is the difference between the 2 visible?

Quiz

```
a = 6
a %= 9
print(a)
```

```
    6
```

Challenge 2: Print last digit

```
N = 1234
res = N % 10
print(N)
```

```
    1234
```

Challenge 3: Remove the last digit

```
N = 1234
N //= 10

print(N)
```

```
    123
```

Let's assume that we are working with positive numbers for this problem now :)

1. Convert to positive, remove last digit and convert back to a negative number.

```
N = -100
N *= -1 # converts to the positive number

N //= 10
N *= -1 # again convert back to a negative number
print(N)
```

```
    -10
```

2. Use int() function because it just removes the decimal part.

```
N = -1234

N = int(N / 10)

print(N)
```

```
    -123
```

Challenge 4: Print all the digits of a number from right to left.

```
N = int(input())
```

```
    1234
```

```
if N == 0:
  print(0)
```

```
while N > 0:
  # print the last digit
  print(N % 10)
  # remove the last digit from N
  N //= 10
```

```
      4
      3
      2
      1
```

```
  if N == 0:
    print(0)
```

```
      0
```

Challenge 5: Read T numbers as input from the user and print them

```
N = int(input())
i = 1
while i <= N:
  print(i)
  i += 1
```

```
      3
      1
      2
      3
```

```
5
```

```
      5
```

```
N = int(input())
i = 1
while i <= N:
  x = int(input())
  print(x)
  i += 1
```

```
      3
      12
      12
      34
      34
      56
      56
```

✓ 1s   completed at 00:24   ● ✕