

CODECLUB

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POWERED BY:

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Python CodeClub

bit.ly/pythoncodeclub

QUESTIONS FROM LAST WEEK

COMPLEX NUMBERS

- Create a class named **Complex**
- Complex number should hold the real and imaginary part
- The class should have a method **__init__** for initializing the complex number
- Documentation is your best friend:
<https://docs.python.org/3.5/tutorial/classes.html>

complex.py example

```
class Complex:
```

```
    real = None
```

```
    imaginary = None
```

```
def __init__(self, r, i):
```

```
    self.real = float(r)
```

```
    self.imaginary = float(i)
```

main.py example

```
from complex import Complex
```

```
if __name__ == "__main__":
```

```
    print(Complex(1, 2))
```

```
    print(Complex(0, 2))
```

```
    print(Complex(1, -2))
```

```
    print(Complex(0, -2))
```

```
    print(Complex(-1, -2))
```


Make *main.py* print values like this

```
> python main.py
```

```
1.00 + 2.00i
```

```
2.00i
```

```
1.00 - 2.00i
```

```
-2.00i
```

```
-1.00 - 2.00i
```

CHALLENGE I

- Download **tests.py** from bit.ly/PCCDropbox
- Make the tests pass by running **python tests.py**

CHALLENGE 2

- Make your own tests for:
 - Adding complex numbers
 - Subtracting complex numbers
 - Multiplying complex numbers
 - Dividing complex numbers
 - Finding the absolute value of a complex number

CHALLENGE 3

- Make your own tests pass :)

FINALLY

- Find the same challenge from [hackerrank.com](https://www.hackerrank.com) > Python domain > Classes
- Make needed adjustments and submit the challenge

INFO

- Ask for an extra special task or challenge us! :)
- Challenge yourself at www.hackerrank.com
- taavi@thorgate.eu / ken.veski@ttu.ee