Creating a Complex Number

In [1]:
```
z= 3+4j
```

Accessing the Real and Imaginary Parts

In [2]:
```
print(z.real)
print(z.imag)
```

```
3.0
4.0
```

Operations with Complex Numbers

In [3]:
```
a= 3+4j
b= 1+2j
```

In [4]:
```
print(a+b)
```

```
(4+6j)
```

In [5]:
```
print(a*b)
```

```
(-5+10j)
```

In [6]:
```
print(a/b)
```

```
(2.2-0.4j)
```

Using Built-in Functions

In [8]:
```
print(abs(z))
print(z.conjugate())
```

```
5.0
(3-4j)
```

Complex Number in the cmath Module

In [11]:
```
import cmath
```

In [12]:
```
z=1+1j
```

In [13]:
```
print(cmath.phase(z))
```

```
0.7853981633974483
```

In [14]:
```
print(cmath.polar(z))
```

```
(1.4142135623730951, 0.7853981633974483)
```

In [15]:
```
print(cmath.sqrt(z))
```

```
(1.09868411346781+0.45508986056222733j)
```

In [ ]:
```

```