

AP Computer Science

Exceptions

Throwing exceptions

```
throw new ExceptionType ();
```

```
throw new ExceptionType ("message");
```

- Causes the program to immediately crash with an exception.
- Common exception types:
 - ArithmeticException, ArrayIndexOutOfBoundsException, FileNotFoundException, IllegalArgumentException, IllegalStateException, IOException, NoSuchElementException, NullPointerException, RuntimeException, UnsupportedOperationException
- Why would anyone ever want a program to crash?

Exception example

```
public void setLocation(int x, int y) {  
    if (x < 0 || y < 0) {  
        throw new IllegalArgumentException();  
    }  
    this.x = x;  
    this.y = y;  
}
```