

```
/** Quick sort, functional style */
```

```
object FunctionalQuickSort {
```

```
  def sort(a: List[Int]): List[Int] = {
```

```
    if (a.length < 2)
```

```
      a
```

```
    else {
```

```
      val pivot = a(a.length / 2)
```

```
      sort(a.filter(_ < pivot)) :::
```

```
        a.filter(_ == pivot) :::
```

```
        sort(a.filter(_ > pivot))
```

```
    }
```

```
  }
```

```
  def main(args: Array[String]) {
```

```
    val xs = List(6, 2, 8, 5, 1)
```

```
    println(xs)
```

```
    println(sort(xs))
```

```
  }
```

```
}
```