

What is the following used for?

```
int * var_name;
```

```
int * dynArr
```

Objects combine both
 operations ("methods" in Java)
 +
 data information ("data member")
 ("instance variables")
 into a single syntactically structure

```
class Point
```

```
{
  private int x;
```

```
private int y;
```

```
public void set (int xParam)  
{  
    x = xParam;  
}
```

```
public int get x ()
```

```
{  
    return x;
```

```
} return this.x;
```

alt. in C++
↓

this → x

```
public double distFromOrigin ()
```

```
{
```

```
    return (  $\sqrt{x^2 + y^2}$  );
```

```
}
```

```
}
```

```
class Triangle
```

```
{
```

```
    Point p1, p2, p3;
```

double getArea ()

ε ... p1.get X () - p2.get Y ()

Access Modifiers

- private
- protected
- public
- (default)

Rule of Thumb on Access modifiers

- make data members private
- make methods public