

Skeleton

In this lesson we are going to see some of what can be done using the kinect. **You are going to be given some code** and asked to change and add things to it.

Tasks:

- The first task is to run the program and see what happens. Make sure you see something happening.
- **Change the fill and stroke colour in the sketch.** Hint: look for fill and stroke already in the sketch and change them.
- We have added a **float** variable to the program called **xPos**. **Find the following code in your sketch.**

```
xPos = joints[KinectPV2.JointType_HandRight].getX();
```

- This code sets the variable **xPos** equal to the position of your right hand. **Draw an ellipse to the screen and use the xPos variable as its x position.** Run this and see what happens.
- We are able to get the y position of your hand in a similar way. **Using the previous code as reference declare a new float variable called yPos and set it equal to the y position of your right hand.**
- **Similar to the above have your left hand control the width and height of the ellipse.**
- We can do the same thing for any other body part as well. **Have another body part control the x position of a new ellipse.**

Extra Tasks:

- In the previous tasks we succeeded in controlling an ellipse with our hands, but if we wanted to move it all the way across the screen we had to physically move quite far. To fix this we can use a new function called **map()**. **Replace this code:**

```
xPos = joints[KinectPV2.JointType_HandRight].getX();
```

With this code:

```
xPos = map(joints[KinectPV2.JointType_HandRight].getX(), 1000, 1300, 0, width);
```

- The code above will make the ellipse move the whole way across the screen when you move your hand between 1000 across and 1300 across. This makes it easier to move the ellipse quickly. **Change the numbers in the code and see what happens.**
- You can use this mapping function to make objects easier to control or a game more playable.