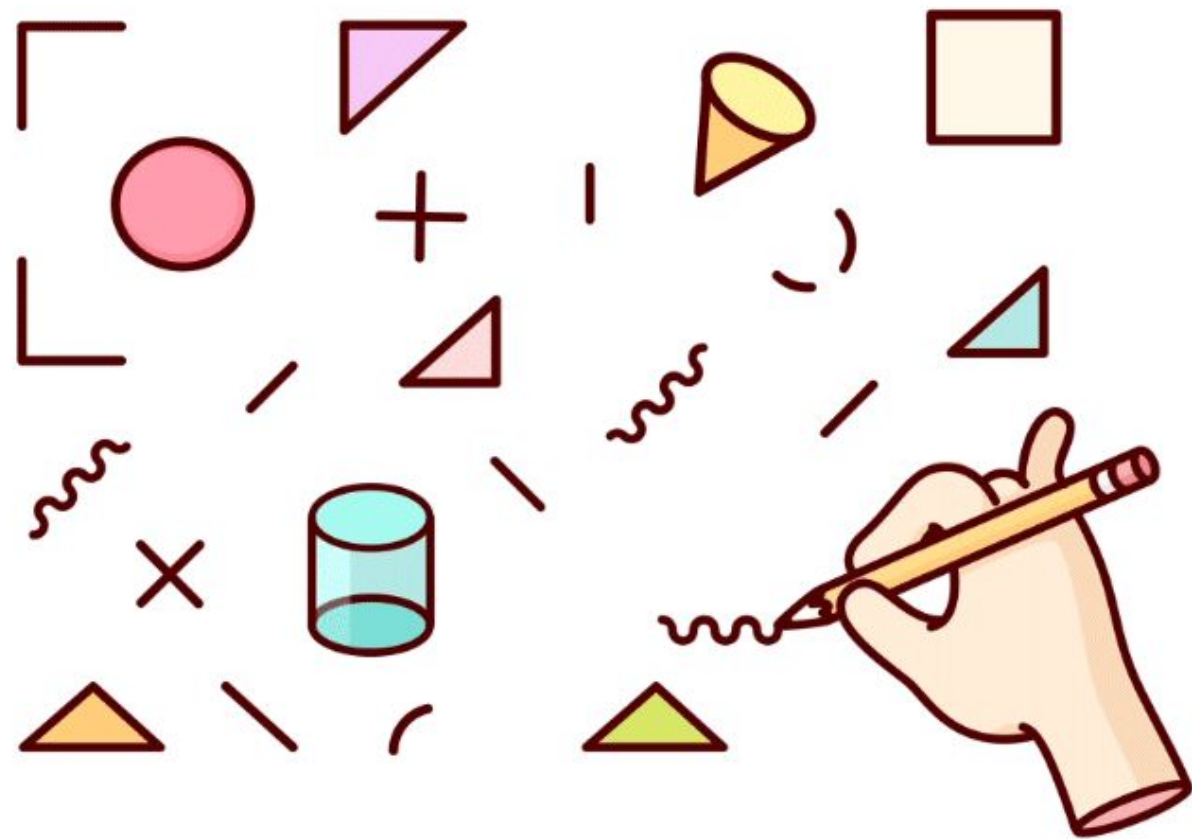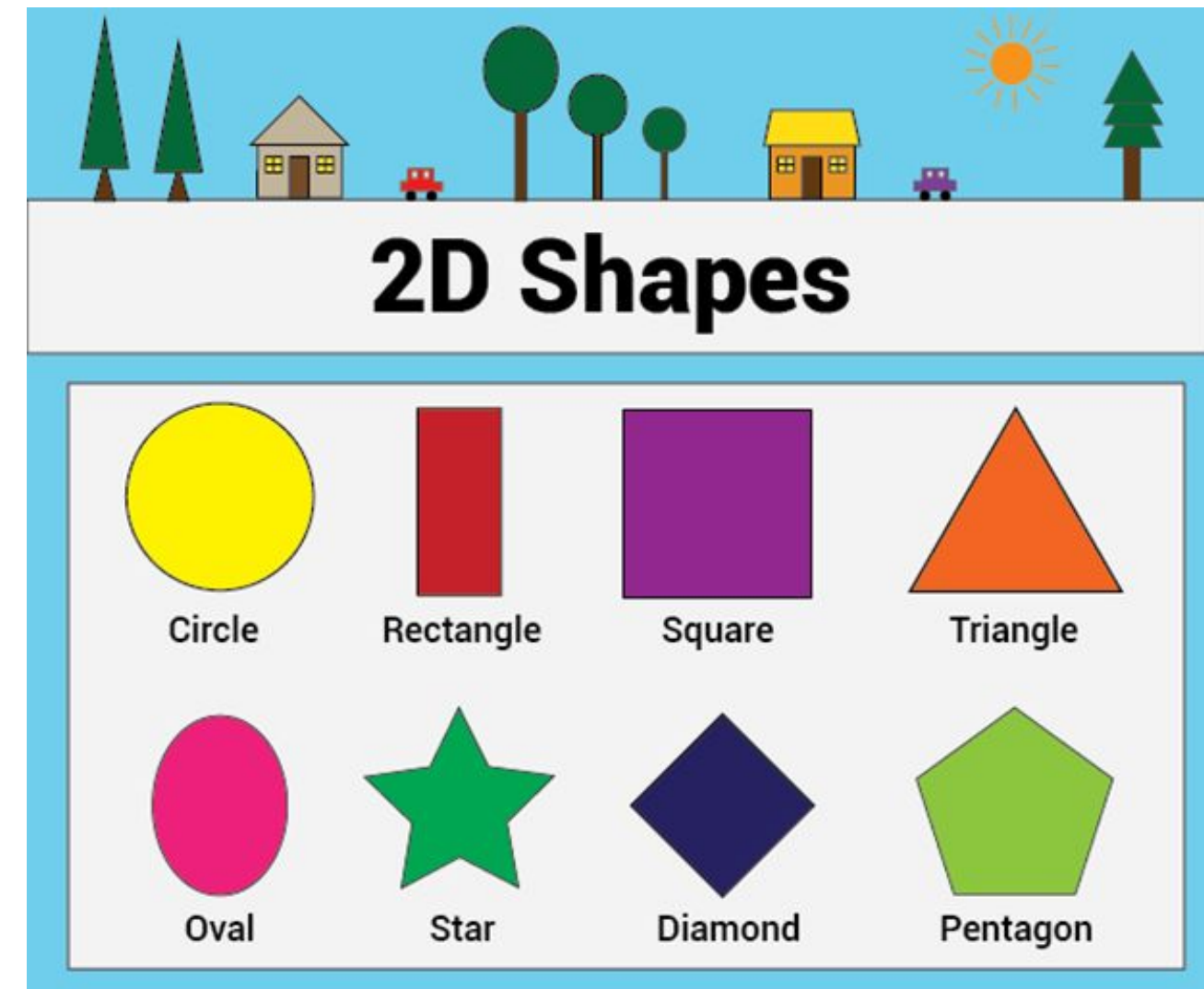# Session Number -2 Drawing Shapes

Activity- Drawing Shapes
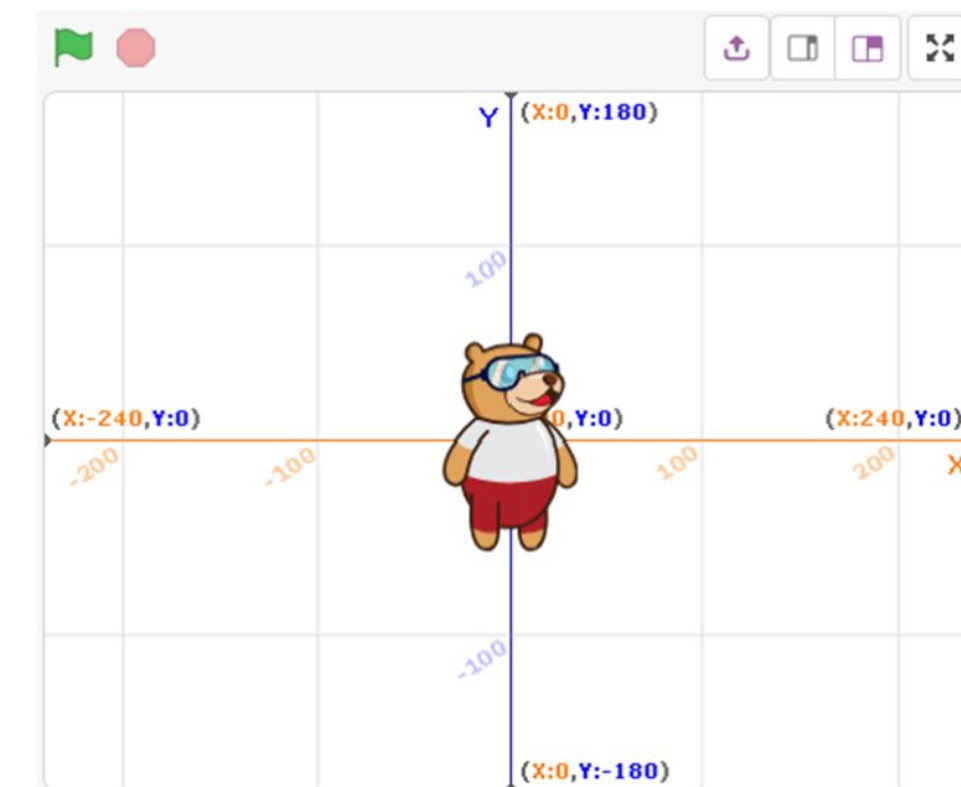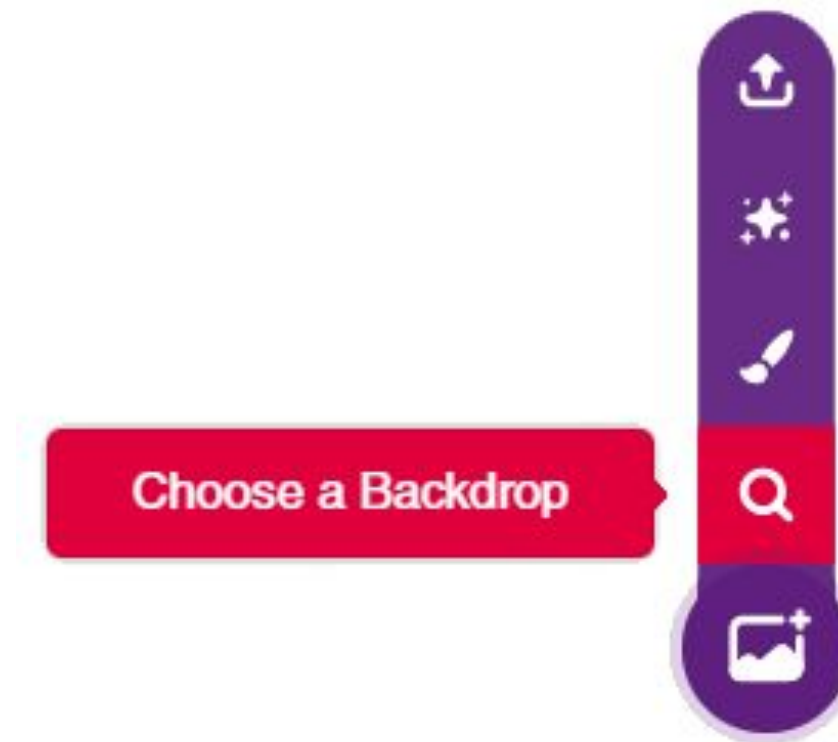
A shape is an **external form**, **boundary**, or **outline of an object**. Some of the common shapes are:

- Circle

- Rectangle

- Square

- Triangle

- Oval

- Star

- Diamond

- Pentagon

2D Shapes

Circle   Rectangle   Square   Triangle

Oval   Star   Diamond   Pentagon

Preparing the Stage for Drawing

- Click on the **File button** and select **New** to open a new project.

- First, we will set the Backdrop. Choose the **Xy-grid backdrop** from the Backdrop library.

Choosing the Sprites-

Similar to adding backdrop, click the **Choose a Sprite** button and add the pencil sprites from the library.

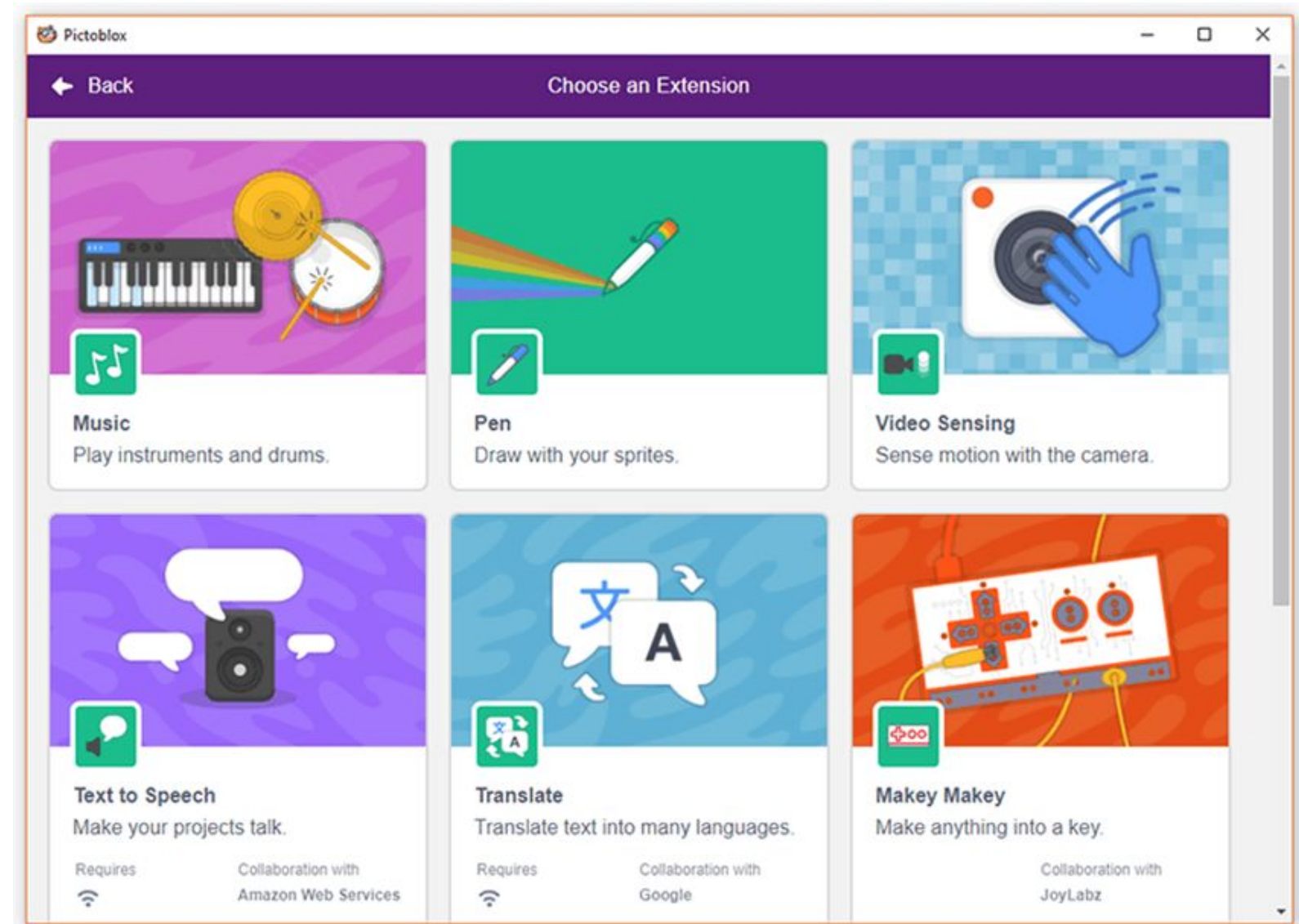This can be done by writing name in the search bar and clicking on that.

Pen Extension

To draw anything with the pen, we will need **pen extension** blocks.

Click on the **Add Extension** button.

Then, click on the **Pen extension** to add use the blocks.

Pen Extension Blocks

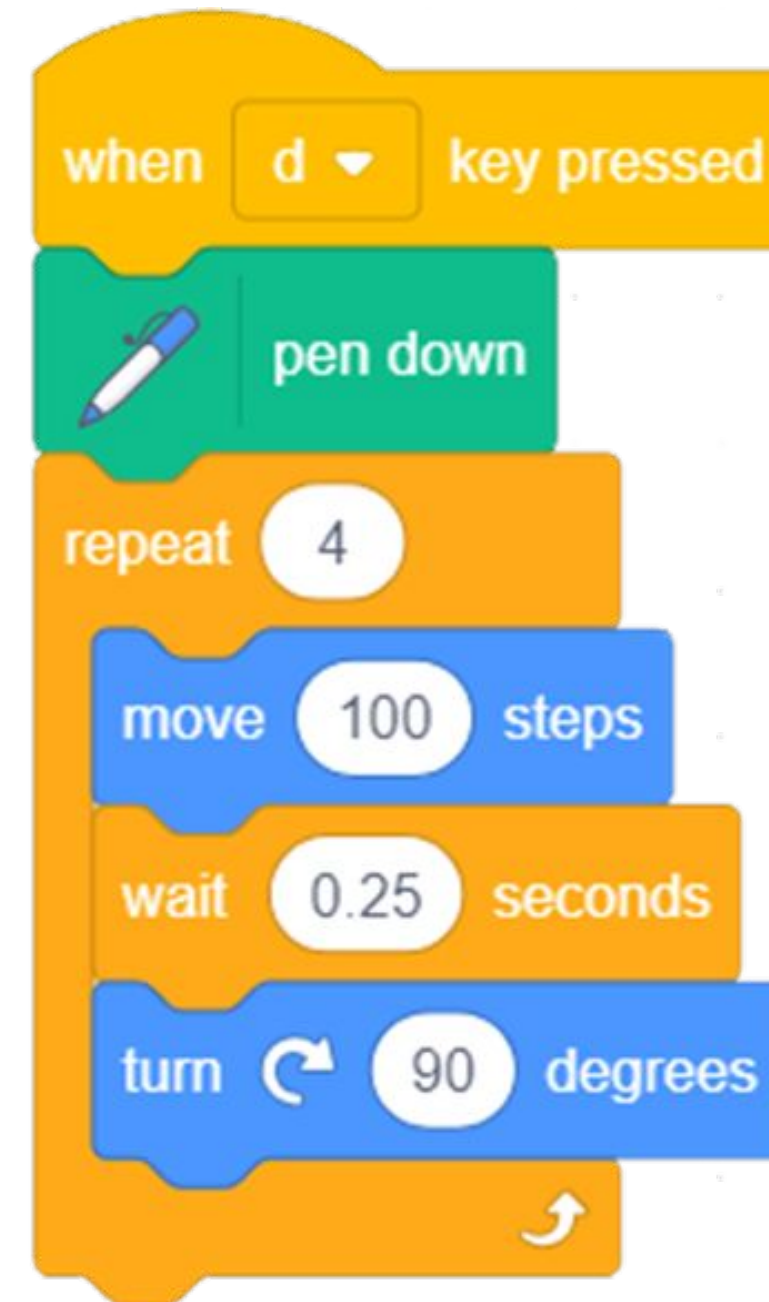We will be using the following blocks from the **pen extension** in the next topic.

- When you run the **pen down** block, you enable a mode where, whenever the sprite moves, it will draw lines on the stage.

- When you run the **pen up** block, you enable a mode where the sprite does not draw while moving. To erase all the lines, we will use **erase all** block.
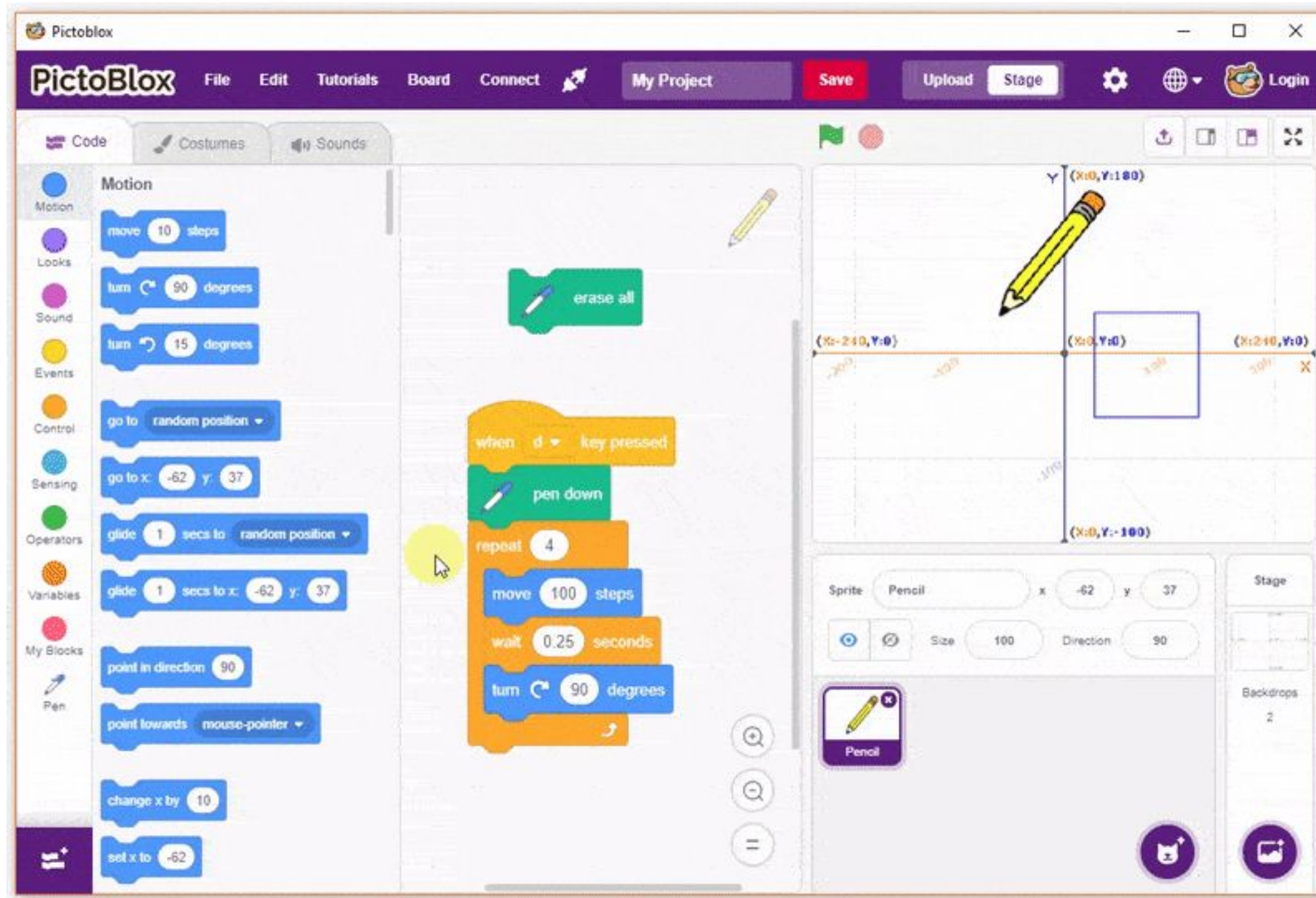
Activity-1 : Let's make a Square Using script

- Now, let's create the script to draw the square by **stacking all the blocks together.**

- Place a **pen down** block above the repeat block to draw the square and place a **when () key** pressed block above the entire script. That's it.
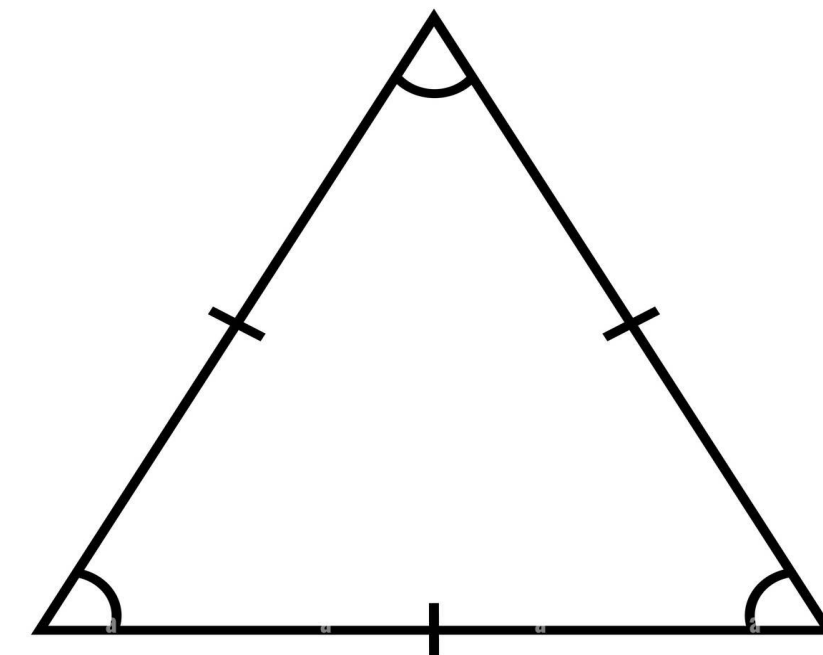
- Click the Green Flag to run the script.

Activity-2 : Let's make a Triangle Using script

- A triangle has **three sides** instead of four. There are different triangles and different ways of drawing a triangle, but we'll stick to the easiest one: the **equilateral triangle**.

- The best thing about drawing an equilateral triangle is that you need only one value for the angle. The **exterior angle** for this triangle is **120°**.
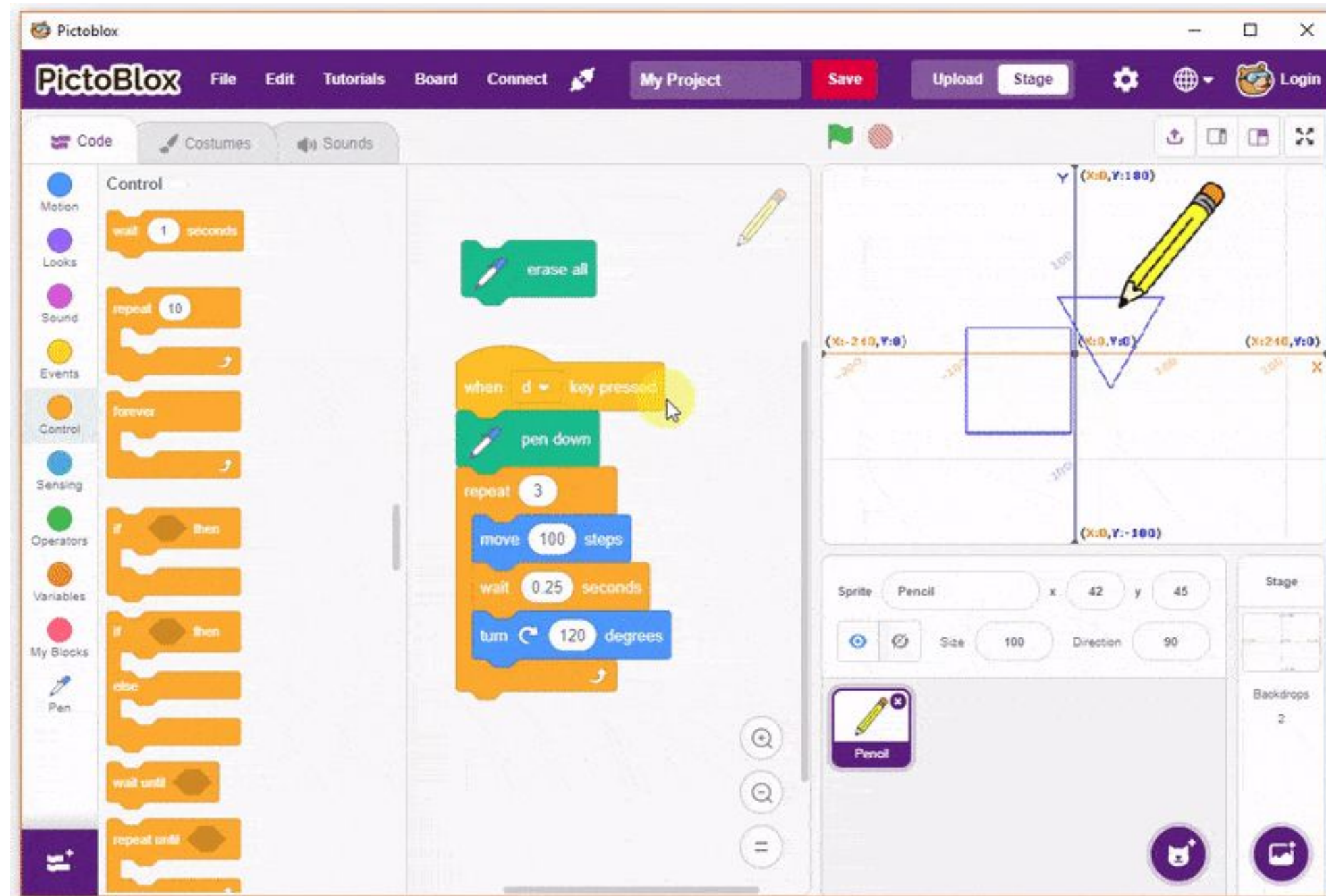

Equilateral Triangle

Draw the Triangle

- Choose **pen Extension**

- Add a **pen down** block.

- Next, to draw the triangle, add a **repeat** block and write **3** in the space given.

- Add a **move () steps** block under the repeat block.

- Next, add a delay of **0.25** seconds using a **wait () secs** block

- Then, add a **turn () degrees** block and write **120** in the space.

- Click the Green Flag to run the script.

Thank you for your attention!