

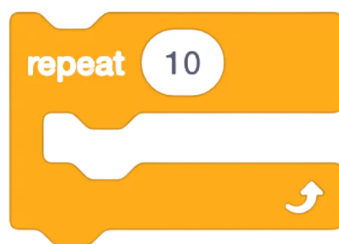
5. Control Blocks

Control blocks (**orange**) are the **logic and flow** of your programs. They let you create loops (repeating actions), conditionals (making decisions), pauses, and clones. Understanding Control blocks is one of the most important steps in becoming a confident coder.

Wait [] seconds	Pauses the script for a set number of seconds before continuing to the next block. You can use decimals (e.g. 0.2 seconds) for short pauses.
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Repeat []	Runs the blocks inside it a specific number of times and then continues to the next block below.
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Observe with project-[Nepali music instrument](#)

Forever	Runs the blocks inside it endlessly in a loop until the project is stopped (or a Stop block is used).
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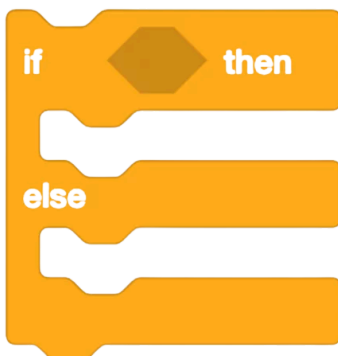
**If <condition>
then**

Checks a condition. If it is true, the blocks inside run once. If it is false, they are skipped.



If <condition> then / else

Checks a condition. If true, runs the blocks in the first section. If false, runs the blocks in the else section. This allows two different outcomes.



**Repeat until
<condition>**

Keeps running the blocks inside until a condition becomes true. Unlike 'Forever', this loop eventually stops on its own when the condition is met.



**Wait until
<condition>**

Pauses the script completely until a condition becomes true, then continues. Unlike 'Wait [n] seconds', you do not need to know exactly how long to wait.

wait until



Stop [all]

Stops scripts. You can choose to stop all scripts in the project, just this script, or all other scripts except this one.

stop

all



**When I start
as a clone**

A special hat block that runs when a clone of the sprite is created. Code inside this block only runs for clones, not the original.

when I start as a clone

**Create clone
of []**

Creates a copy (clone) of a sprite. The clone behaves independently and runs any scripts starting with 'When I start as a clone'.

create clone of

myself



Delete this clone

Removes the clone from the stage. Since clones take up memory, it is good practice to delete clones that are no longer needed (e.g. when they go off screen).

**delete this clone**

Let's learn with projects:

Add when flag clicked ,wait and repeat to create a animation in a previous project-[Bear Walking](#)

Add 'when flag clicked' and forever loop block to a previous project- [Build a band](#)

Add 'when flag clicked' and forever loop block to a previous project-[Dance](#)

Let's re-learn some old blocks with projects:

Tip: Re-visit old blocks used here to understand what they do.

[Computer animation](#)

[Sound pitch](#)

[Tihar Story](#)