# Lesson 11 – Sequencing
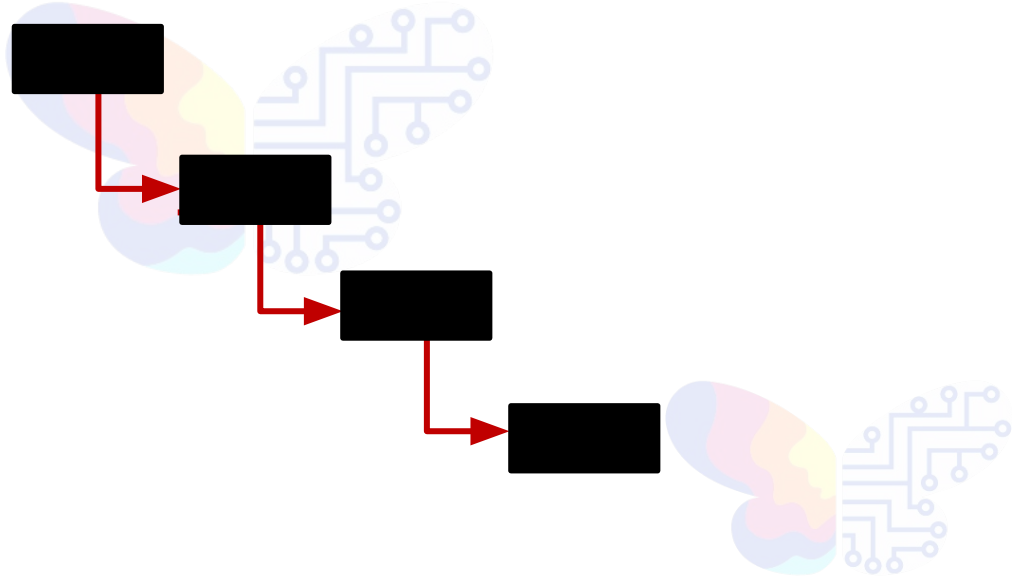
# Note for Faculty

1.  This lesson has no theory.

2.  It will be learnt using a story that will bring out the essentials of any sequence in coding.

3.  This again helps boost imagination & creativity amongst children.

**Lesson learning**

A computer runs all codes one line at a time.

It thus needs to be given instructions one line at a time, in the order in which we desire then to be executed.

In this lesson we shall learn about this order, **also called sequencing**.
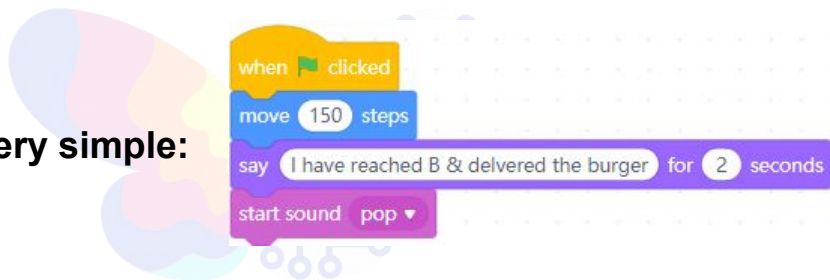
# Project 24 – Delivery Boy

Say we are coding the actions of a delivery boy. To do this, we need to quantify the move of a boy from A to B. For this a possible story could be:

 "Start from A, move 150 steps to B, say I have reached B & delivered the burger, & then play sound pop".

**The code for this is very simple:**

**In this code:**

**This set of instructions:**



```
when [flag] clicked
move 150 steps
say I have reached B & delvered the burger for 2 seconds
start sound pop ▾
```

**is called a**
**SEQUENCE or SEQUENCING**

**It is closely linked to the STORYLINE for the code**

**Project 25 – A Day Cycle**

We have been given a **project** by our teacher to **Graphically show  a complete day cycle.**

Whenever we start working on a coding project, we must carry out an internal assessment or analysis of what all is involved, & how we plan to execute it.

Let us go through this process.

# Analysis of the Project

A typical analysis could be:

   1.   To show a day cycle, one possible method is to show at least four parts of the day – Morning with sunrise, Afternoon, Evening with sunset & Night with the moon.

   2.   In this project we are using only one Sprite – a Boy around whom the story will be built.

   3.   We need to select four different backgrounds – showing Morning, Afternoon, Sunset & Night.

4.  Now that the characters of the story have been finalised, let us make a story line to arrive at the correct sequence to code.

## A possible Storyline

**Every child will have his unique storyline.**

**A possible story could be –**

**"The boy wants to go walking to his grandparents apartment which is way across the city & really far away. He will take an entire day to do so. Therefore, he must start from his farm in the Morning.**

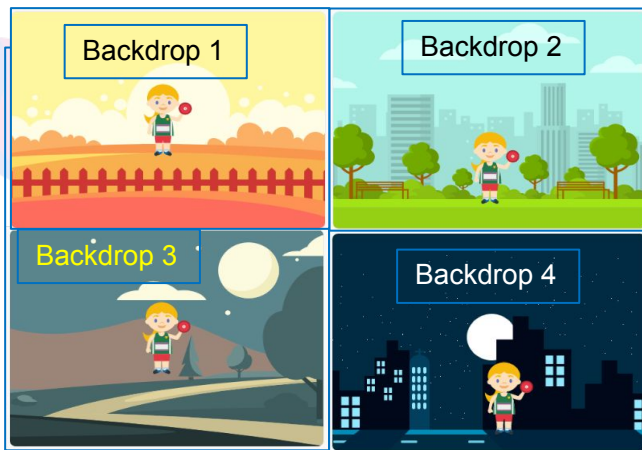**At noon he would need to rest in the city park.**

**By the time he reaches the outskirts of the city it would be evening & by the time he reaches his grandparents apartment it would be night".**

# Selecting Backgrounds

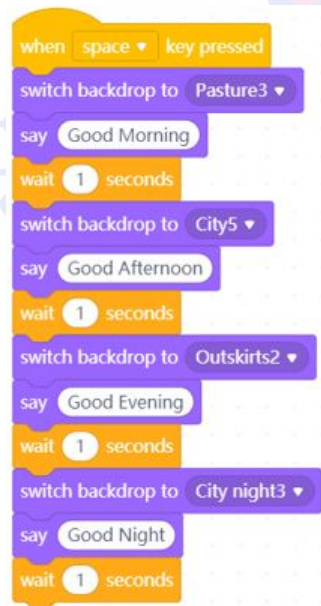We have selected four backdrops as per the story.

**Project Code.**

The possible code for this is: ⟶

It is a typical ex of a sequence.



```
when space ▾ key pressed
switch backdrop to Pasture3 ▾
say Good Morning
wait 1 seconds
switch backdrop to City5 ▾
say Good Afternoon
wait 1 seconds
switch backdrop to Outskirts2 ▾
say Good Evening
wait 1 seconds
switch backdrop to City night3 ▾
say Good Night
wait 1 seconds
```

# Take Aways…

- **All codes contain a number of actions. These need to be executed in a prescribed manner for the code to run successfully. If not it will result in an error.**
- **For this, blocks are stacked one below the other in the correct order.**
- **This is called a sequence, & the process is called sequencing.**

# End of Lesson 11



**Code Karega India Badhega**