



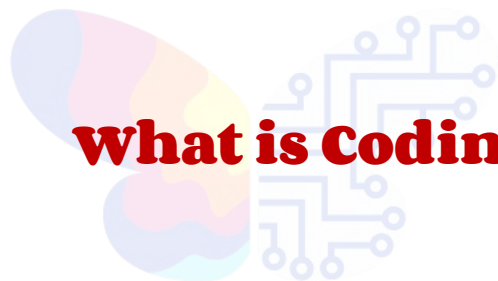
## Lesson 2 – Getting Started with Sprites





## **Note for Faculty**

- 1. The next four lessons will lay the stage for all future learning. They are thus very important.**
- 2. Do not be in a hurry, & kindly spend time on them if required.**
- 3. Be as interactive as possible.**
- 4. Prepare your questions for each slide.**
- 5. Think of the questions, as well as the answers that children may come out with.**
- 6. Prepare all your answers using examples from the daily life of a child.**
- 7. Annotate them in the master copy of your book.**

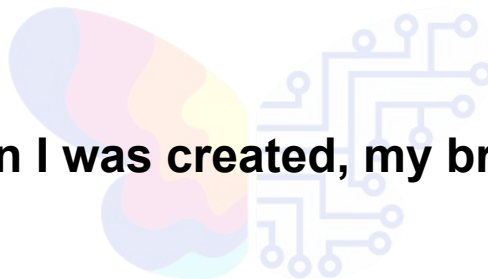


# **What is Coding**





**When I was created, my brain was empty**





It was then loaded with instructions  
**to help me take actions**  
**& work for humans like you**





**Let me give an ex of one work I was coded to do**





**I was told**

**IF** room temp goes over 27 degree

**THEN** put AC on.





In the same way:



When I was Born, I knew:

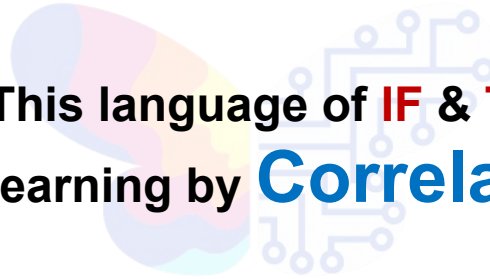
**IF** I cry, **THEN** I get attention.







This language of **IF** & **THEN** in my case is called...  
learning by **Correlation.**

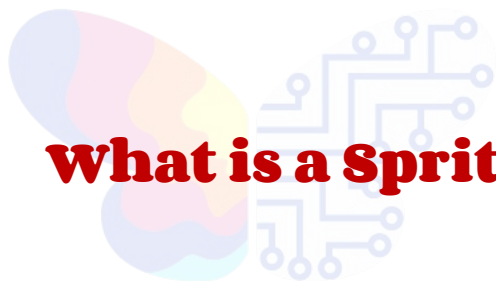




& in the case of a robot

This language of **IF** & **THEN** is called - **Coding**.





# **What is a Sprite**





In Coding Language images like these →  
that need to be **coded**  
to execute desired actions  
are called **SPRITES**

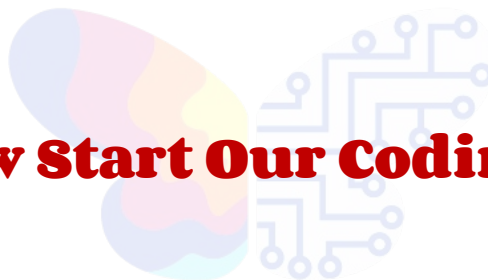




**Children**

**Can you now show me a few Sprites around you?**





**Let us now Start Our Coding Journey**





**As a child grows  
It learns to sit**



**stand**



**& MOVE around**





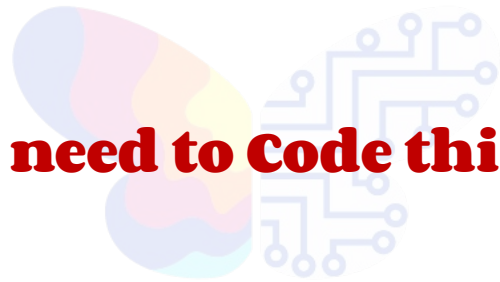
Let us also start our **Coding Journey**  
by **CODING** our friend Rohan  
to **MOVE** around







**What do we need to Code this Sprite (boy)**





**First of all**  
**we need a Story –**

**What we want Rohan to do?**





**Our coding story for Rohan is:**

**“To start with, stand on the left side of a bed.  
When Green Flag is Clicked,  
Move to the other side of the Bed”**





**Secondly, to execute this code, we need a place**  
**This place is called a Stage –**

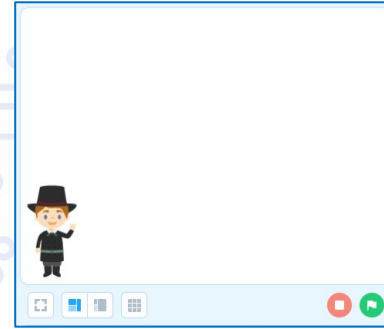
**It is a place on our screen, where**  
**Rohan execute the story for us to see.**





**The stage for this code is: →**

**As per the story  
Rohan is standing at the left.**





To make it realistic  
we also need a **Background** for the stage



**Remember**

Rohan can also have **his brother Tanish with him**

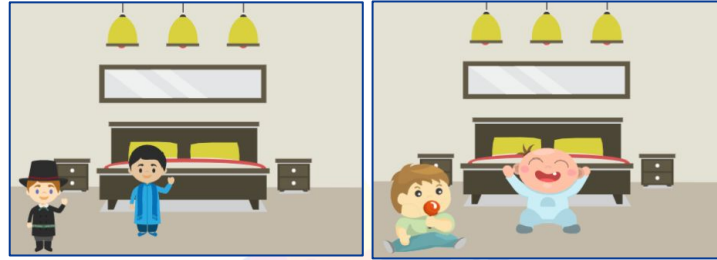
**It all depends on our story.**



Tanish can  
keep **changing** positions

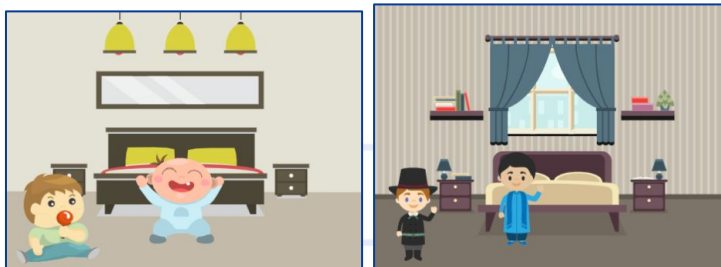
It again depends on our story.





We could totally  
**Change the sprites**

It again depends on our story



The stage can also  
keep **changing** backgrounds

This will also depend on our story



**Thirdly, we need a Code –**

**Code is a set of instructions Rohan & Tanish can follow.**



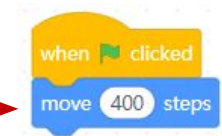


**A typical code for a sprite looks like:** →





This is considered as **one code line**.

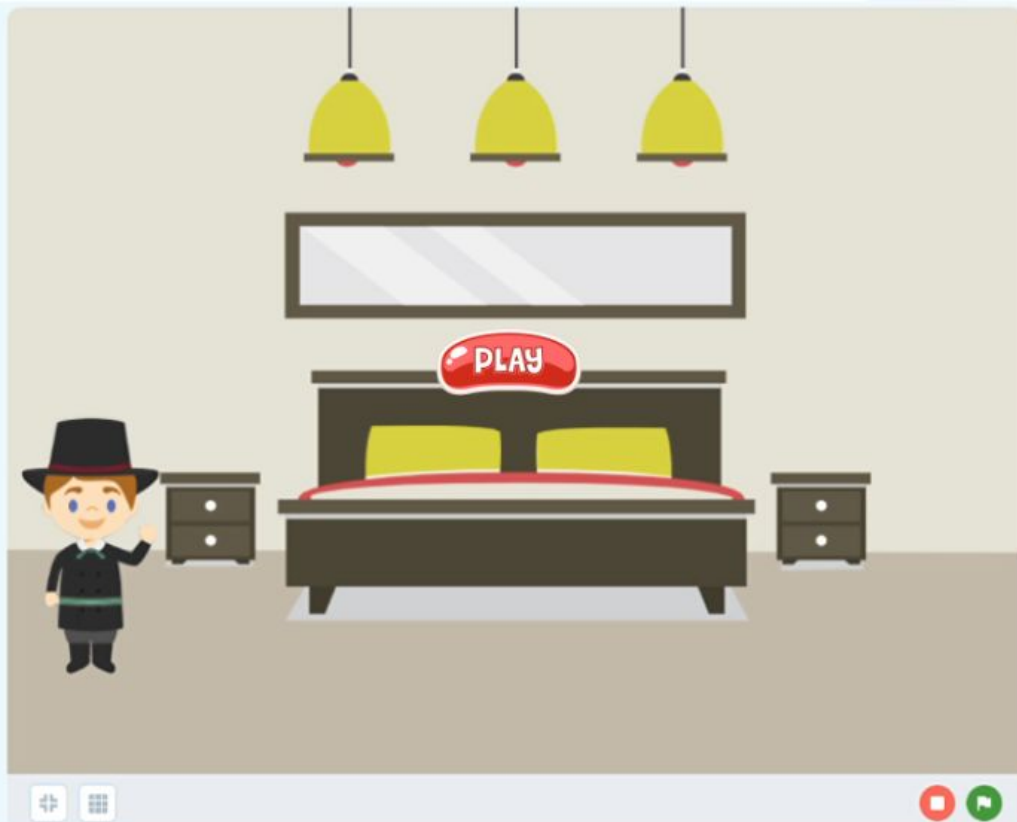
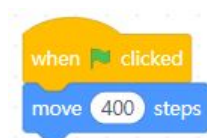


Together they make a **two line code**.





Let us now see a video on the code run.





**What did we see?**

**We saw that when green flag was clicked.  
Rohan came from one side of the bed to the other.  
In other words - He did what he was coded to do.**





## So children! Today we have learnt:

- What is Coding
- **What are sprites**
- What is a story
- **The need for a stage**
- The need for a background
- How does a two or three line code look like

**& finally, we also saw Rohan perform for us**







# **To Consolidate**

**Can you all, as per your imagination, now:**

**Draw one sprite for me**

**Make a two line story for it**

**Draw what a stage for this story will look like**

**Put the story in two or three lines**





**End of Lesson 2**



**Code Karega India Badhega**