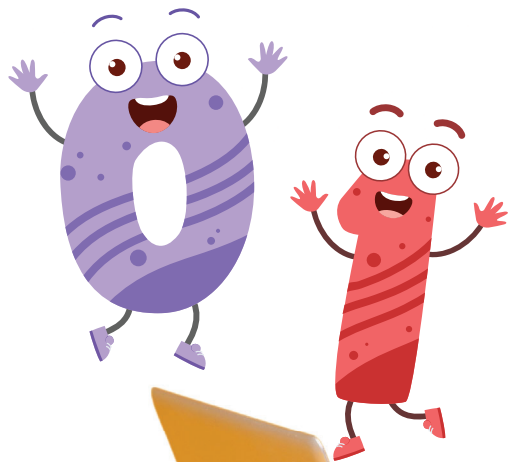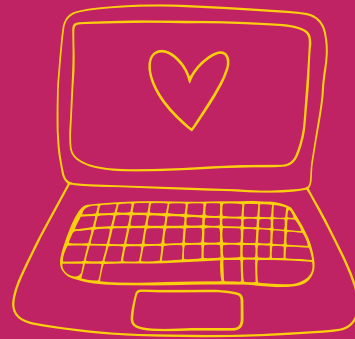# RobART

CREATIVE CODING

COURSE FOR KIDS

Coding
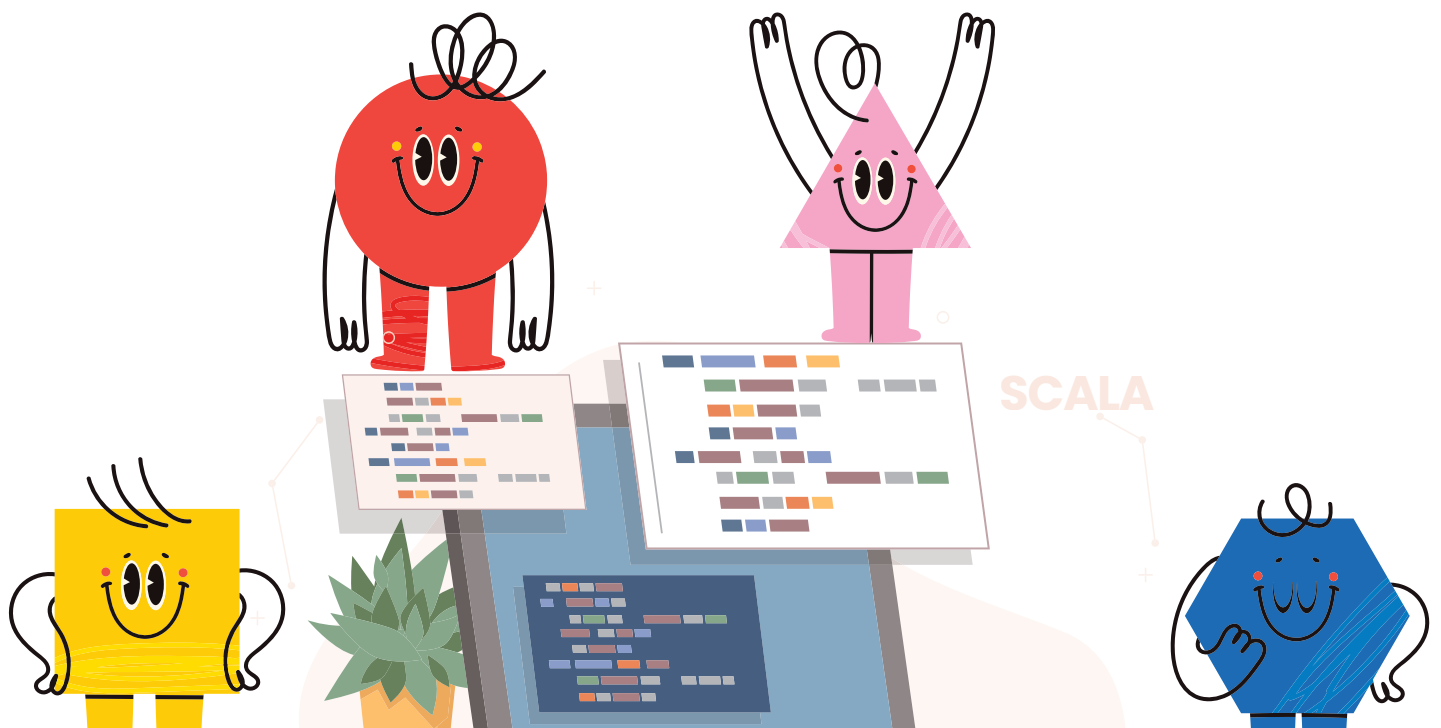## Should Be
Fun & Exciting!

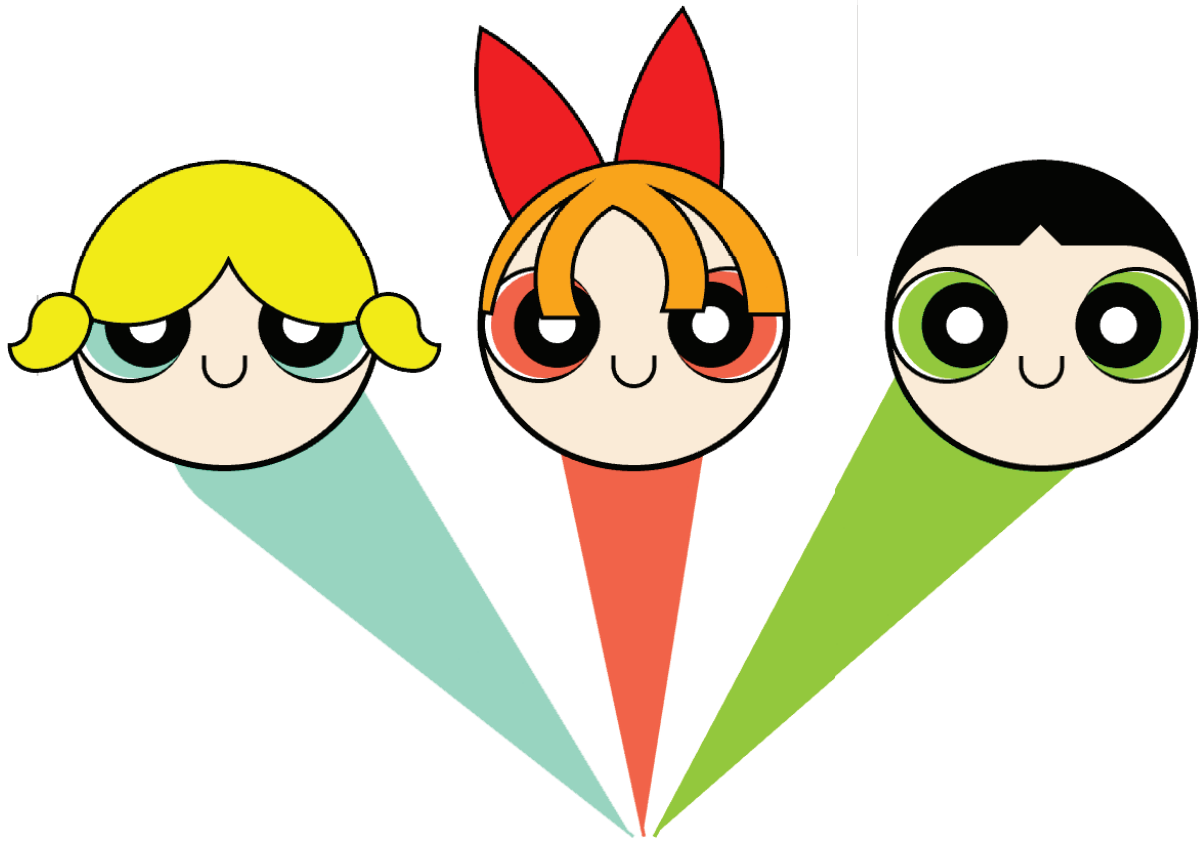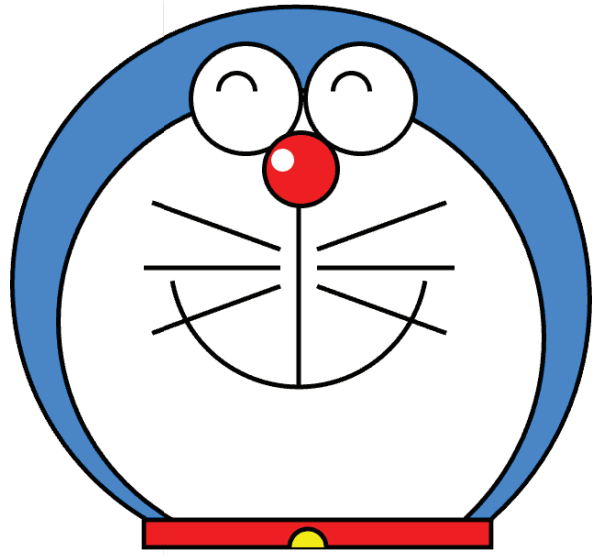**Kids should learn to code art to exercise their creative & analytical capabilities.**

RobART

Is a Creative Coding Method.

With RobArt Kids learn to create mathematical shapes & patterns by coding in Scala Language.

A few of the shapes created
using RobArt!

Kids can create whatever they imagine using RobArt.

Creating these art pieces gives them a sense of achievement and makes them more confident.

RobART
CREATIVE CODING

Course Details

COURSE DURATION   3 Months • 36 Classes

BATCHES & TIMINGS

Weekdays - WDA
Mon - Wed - Fri
5:00pm to 6:00pm

Weekdays - WDB
Tue - Thu - Sat
6:00pm to 7:00pm

Weekends - WEA
Sat - Sun
10:00am to 11:30am

Weekends - WEB
Sat - Sun
2:00pm to 3:30pm

Max 15 kids in each batch

GROUPS

Little Buddies
3rd Grade to 5th Grade

Big Buddies
6th Grade to 8th Grade

TEACHING & LEARNING

Online Instructor led interactive training with great engagement

Learning Management System for Revision and Practice

Interactive student clubs for sharing creations and inspiration

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SHOWCASE   An online showcase to present kid's creations

ASSESSMENT & CERTIFICATION

Test for coding knowledge

Projects

Certification for Qualified Kids from {igebra.ai}

FEE   **Rs.25000/-**   Fee can be paid in 2 installments

RobART
CREATIVE CODING

Course Topics

INTRODUCTION TO ROBART

Introducing RobArt Platform
Input & Output Selection
Introducing Turtle and Fun Facts about it
Basic Scala Rules
Saving Projects

MATH OPERATIONS

Addition, Subtraction, Multiplication & Division

BASIC TURTLE COMMANDS

Drawing Commands

savePosHe & restorePosHe

Additional Commands

Properties

Basic Scala Commands using Text

GEOMETRIC SHAPES

Square, Rectangle, Circle, Triangle, Rhombus
and Semi Circle

POLYGONS

Pentagon, Hexagon, Heptagon, Octagon,
Nonagon and Decagon

CO-ORDINATE SYSTEM

X, Y Co-ordinates, Origin (0,0) - [Center]
and setPosition command

VARIABLES & VALUES

Difference between val & var

PICTURES

Picture Creation, Picture Transformation, and
Picture Layout

ANIMATION

Joystick, Keyboard Keys, Mouse, & setAnimationDelay

CANVAS

Introduction to Canvas and Canvas Bounds

RobART
CREATIVE CODING

Course Topics

CONDITIONS

if Else

Nested Conditional: What If this OR that OR something else

BASIC DATA TYPES

Int, Double, String, Boolean, Color, Picture, Unit and Collections (Array)

DATA COLLECTIONS

Sequence (Seq), Array, ArrayBuffer, Range, Map -> HashMap, Set -> HashSet, Option and Tuple

---

DEFINE FUNCTIONS WITH PARAMETERS

Computing with pure functions and data flow

Immutable data (and data structures)

Functions as values

Comparison of the imperative and functional way of doing something (with an example)

GAMES

Picture collisions and bouncing

Pictures - responding to the keyboard, joystick, and mouse clicks

Making a game - Hunted

ArrayBuffers and HashMaps for gaming

Hunted 2 - increasing the number of hunters without any code change

Hunted 3 - adding background and character images

PROJECTS - FLAGS

Japan, Bangladesh, Palau, Somalia, Vietnam, Switzerland, Argentina, India, China, Ukraine, Russia, Netherlands, Germany, Poland, Luxembourge, Hungary, Morocco and UAE

RobART
CREATIVE CODING

PROJECTS – SCIENCE

Multiple Turtles

Turtle Solar System

PROJECTS – FLOWERS/TREES/ NATURE

Rangoli Sun, Crystal Flower, 5 Flowers, Rainbow Flower, Netherlands Flowers, Lotus, Whie Dandelion Colorful Flower, Long 3D Flower, Grass 3D flower, SunFlower, Flower Mehendi, Flower, Drawing Nature in a Circle, Scenery and Abstract Scary Flower

PROJECTS – SIMPLE & ABSTRACT DESIGNS AND OBJECTS

Kite, Plus, 4 Squares, Virus, Semi Circle, Hexene, Rainy Codes, Bouncy Ball, Mandala, Simple Star, Cute Circle Design, Overlapping Circle Frame, Hut, Castle, Black & White Circle, Umbrella, Rocket, Abstract Wheel, Anxious Face, Ice Cream and Hypno Wheel

LOGOS

Google Picture Logo

Rotating Pokemon

YouTube

Olympics Rings

ASSESSMENT & CERTIFICATION

Test for coding knowledge

Project Assignment

igebra.ai math++
CERTIFIED RobART CODING PRO

Why Creative Coding is Good for Kids

It Gives them Joy!

It Improves their algorithmic thinking!

It Enhances Mathematical Thinking!

It Activates Both Left & Right Brains!

It Makes them Imagine, Create & Share Things!

It Makes them Ready for the Future Careers!
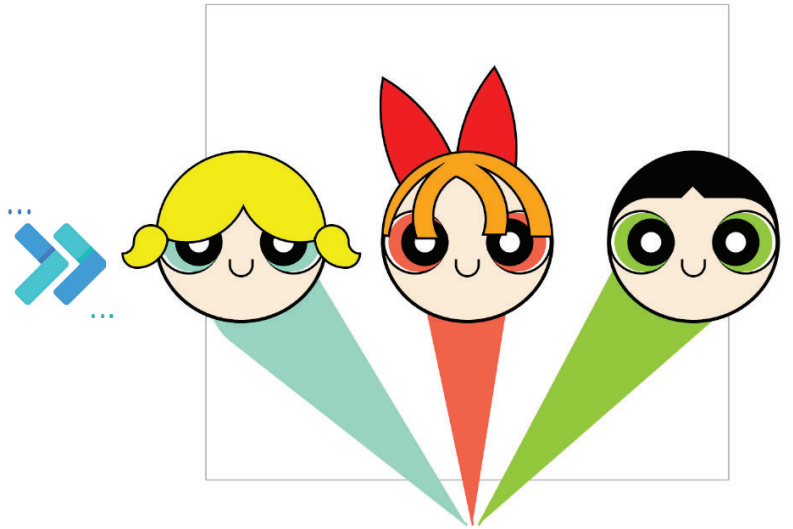
RobART

Makes Kids Write Real Code, Not Just Drag & Drop Objects!

INPUT

```
drawStage(white)
//setSpeed(fast)
val cb = canvasBounds

val ellipse_len=150
val ellipse_wid=140
val circle_radius1=55 // for circle 1 & 2
val circle_radius3=50 // for circles 3 & 4
val circle_radius5=40 // for circles 5 & 6
val circle_radius7=20 // for circles 7 & 8

val pic_light1 = Picture
{
 left(75)
 forward(530)
 right(180,100)
 right(21)
 forward(560)
 }
```

And More Lines of Code...
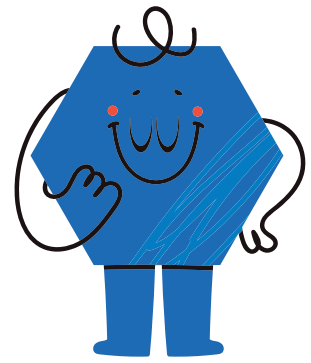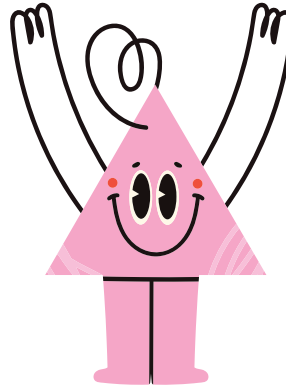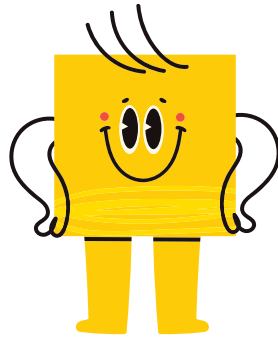
OUTPUT

Kids Fall in Love with Creative Coding!

We Would Love to Show Your Kid the Beauty of Creative Coding with RobArt!

Schedule a FREE Demo

+91 8121040955

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