

Awesome Skills Academy

Scratch & QBASIC Programming Syllabus

Module 1: Scratch Programming (Beginner Level)

Introduction to Scratch

- What is programming?
- Introduction to Scratch interface
- Block-based coding concept
- Creating and saving projects

Sprites and Stage

- Understanding sprites
- Stage, backdrop, and costumes
- Adding and editing sprites

Motion, Looks & Sound

- Motion blocks (move, turn, glide)
- Looks blocks (say, think, costume change)
- Sound blocks (play sound, stop sound)

Events and Control

- Events (when flag clicked, key press)
- Control blocks (wait, repeat, forever)
- Introduction to sequencing

Decision Making & Loops

- If and If-Else conditions
- Repeat loops and forever loops
- Nested conditions

Variables and Operators

- Creating variables
- Using operators (math, comparison, logical)
- Score and timer creation

Animation & Game Design

- Creating simple animations
- Designing basic games
- Collision detection

Project Work

- Interactive Story
- Simple Game (Maze / Catch Game)

Module 2: QBASIC Programming (Fundamentals)

Introduction to QBASIC

- History and features of QBASIC
- QBASIC environment
- Writing and running programs

Variables & Data Types

- Constants and variables
- Data types (Integer, String, etc.)
- Naming rules

Input and Output

- PRINT statement
- INPUT statement
- Formatting output

Operators & Expressions

- Arithmetic operators
- Relational operators
- Logical operators

Conditional Statements

- IF...THEN
- IF...THEN...ELSE
- SELECT CASE

Looping Statements

- FOR...NEXT loop
- WHILE...WEND loop
- DO...LOOP

Arrays and Strings

- One-dimensional arrays
- String handling functions

Functions & Subroutines

- Built-in functions
- User-defined functions
- SUB procedures

Practical Programs

- Calculator program
- Even/Odd number checker
- Multiplication table
- Pattern printing

Project Work

- Student result system
- Simple billing system



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