

## Learning Path For YOUNG LEARNERS



## **BASIC PROGRAMMING CONCEPTS**

During these classes the students will go through a recap of the basic concepts of programming starting from sequencing and gradually moving to loops, conditionals, functions and variables in a block based environment. They will solve puzzles of varying complexities and create projects in blockly programming language during these classes.

SESSION	CONCEPT	SKILLS	
01	Command, Sequence, Algorithm	<b>Sequencing, Step - Wise Thinking</b> Putting commands in a sequence to solve puzzles.	
02	Drawing Shapes	Pattern Abstraction, Decomposition Identifying repetitive blocks of code for drawing simple geometric shapes.	
03	Debugging	Problem Solving, Resilience Identifying errors in the given code.	
04	Counting Loops	Pattern Recognition, Decomposition Identifying patterns in code while solving puzzles.	
05	Nested Loops	Pattern Abstraction, Decomposition Identifying repetitive blocks of code while solving puzzles to draw complex geometric shapes.	
06	Conditionals	Problem Solving, Decision Making Using conditional statements in code while solving complex puzzles.	
07	Conditional Loops	Pattern Abstraction, Decision Making Using loops and conditionals while making a simple animation.	
08	Functions	Logic, Abstraction Use existing function blocks to solve complex puzzles.	









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09	Conditionals	Data Manipulation Use variables, functions and events in code to get differentiated outputs.
10	Formative Assessment	Assessment Of Learning







