

Lesson Plan

- Lesson 1: Learning Sequence
- Lesson 2: Learning Branch, Jump (), goto ()
- Lesson 3: Making decisions, Conditional – if ()
then else ()
- Lesson 4: Fixing Errors, Bug and Debugging
- Lesson 5: Looping with repeat, bounded loops
- Lesson 6: Understanding Functions

Bonus lessons

- Lesson A: Introducing operations, greater, less than. Boolean - TRUE, FALSE
- Lesson B: Introducing Variable, string and numeric
- Lesson C: Nested repeat – Loop in Loop

Lesson C: Nested Loop; Loop inside loop (Game Play – optional)

Before you start – Should have completed Lesson 5

Lesson Overview

Students will do an introductory worksheet of nested loops.

Lesson Objective

- Students will do a worksheet workout how to covert series of multiple actions into repeat loops.
- [Optional] Play a level of game with repeat cards

Materials needed

- Worksheet, pencil

Getting Started

- Instructor explains the worksheet and players do the exercise to understand the nested loop concept.

Activity [Optional]

- Play the Rulebook level 2.1 of CoderBunnyz game to program bunny to reach destination. This time player will use the new concept of nested loop in their code. Continue till all players reach the destinations.
- Then each player reviews their code cards. That's the sequence of code.

Read aloud

C. Loop in Loop

In this section kids learn nested loops.



Read aloud

Multiple loops

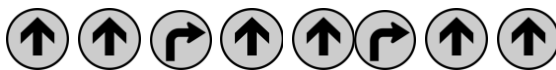
Inner Loop(IL) and Outer Loop(OL)

Repeat (2) // Outer Loop (OL)

Repeat (4) {Go Forward } // Inner Loop(IL)

IL executes 4 times. OL executes 2 times. Total : 8

Circle the paths that could be converted to nested repeat loops



Practice Exercise

Here's an example of converting to nested repeat

↑ ↑ = Repeat(2) ↑

Convert this sequence to repeat by filling the blank



Repeat (_) // OL

[{Repeat (_) ↑ } ↻]; // IL

{Repeat (_) ↑ } // rest of the code

Practice Exercise

