Overview:
This preschool lesson plan is designed for 2-4-year-old children to introduce them to the concept of programming. The lesson focuses on teaching basic sequencing skills, understanding cause and effect, and fostering problem-solving abilities through hands-on activities and games.

Materials:
- Picture cards with simple actions (e.g., clapping, jumping)
- Storybook about programming for preschoolers
- Large magnetic or felt board
- Magnetic or felt shapes
- Puzzles with sequential steps
- Manipulative toys (blocks, beads, etc.)
- Coding apps (optional)

Introduction:
Start the lesson by gathering the children in a circle and explaining that they will be learning about programming. Show them the picture cards with simple actions and ask the children to identify each action. Explain that programming is giving instructions and commands to make things happen, just like giving instructions to perform actions.

Activities:
1. Sequencing Actions (15 minutes):
   - Show the children the picture cards and demonstrate each action.
   - Ask the children to help you arrange the cards in a logical sequence, following the correct order of the actions.
   - Discuss the concept of sequencing and how it helps in programming.

2. Storytime:
"The Adventures of Bot" (15 minutes):
   - Read a storybook about programming for preschoolers, such as "The Adventures of Bot."
   - Discuss the story with the children, focusing on the concept of giving instructions and following sequential steps.

3. Shape Coding (20 minutes):
- Use a magnetic or felt board and magnetic or felt shapes to create simple coding patterns.
   - Show the children a coding pattern (e.g., square, triangle, circle) and ask them to replicate it using the shapes.
   - Gradually increase the complexity of the coding patterns.

4. Coding Puzzles (15 minutes):
- Provide puzzles with sequential steps or patterns that the children need to complete.
   - Encourage the children to problem-solve and figure out the correct sequence to

complete the puzzle.

Closure:
To conclude the lesson, gather the children in a circle and ask them to share one thing they learned about programming. Recap the main concepts discussed during the lesson and reinforce the idea that programming is about giving instructions and following sequential steps.

Extension Activities:
1. Coding App Exploration: Allow the children to explore age-appropriate coding apps that introduce programming concepts through interactive games and puzzles.
2. Sensory Coding: Create a sensory bin with different objects and ask the children to code a sequence of actions using the objects (e.g., move a feather, shake a shaker).
3. Block Coding: Introduce large foam or wooden blocks with arrows or symbols on them. Let the children use the blocks to create sequences and patterns to represent simple actions.

Assessment Objectives:
1. Social-Emotional:
- Participates cooperatively in group activities involving sequencing and problem-solving
- Demonstrates persistence and curiosity when exploring coding-related activities

2. Physical:
- Demonstrates fine-motor strength and coordination when manipulating objects for sequencing and coding activities

3. Language:
- Listens to and follows directions during the introduction and activity instructions
- Expresses understanding of sequencing and cause-effect relationships through verbal communication

4. Cognitive:
- Demonstrates problem-solving skills by figuring out the correct sequence for the coding puzzles
- Uses classification skills to recognize and replicate coding patterns

Assessment Methods:
Observations will be made throughout the lesson to assess the children's social-emotional interactions, physical abilities, language skills, and cognitive engagement. The teacher will also listen to the children and provide individual feedback during group discussions and hands-on activities. Assessment results will inform teaching practices by identifying areas where additional support or extension activities may be required.