

# SNAKE GAME



Snake is a video game first released during the mid 1970s in arcades and has maintained popularity since then, becoming something of a classic. After it became the standard pre-loaded game on Nokia phones in 1998, Snake found a massive audience.

The player controls a long, thin creature, resembling a snake, which roams around on a bordered plane, picking up food, trying to avoid hitting its own tail or the "walls" that surround the playing area. Each time the snake eats a piece of food, its tail grows longer, making the game increasingly difficult.

## Game's Main Objects

### 1. Snake

- a. Attributes of Snake object – Rectangle object array and beginning length = 4
- b. Snake starts at top-left corner
- c. Snake's length increases as it consumes more food.
- d. Snake's speed increases by eating food

### 2. Food

- a. Single unit increases the length of snake by 1.
- b. Each food unit appears at random locations on the grid except first one.
- c. Food cannot appear on any of the cells currently occupied by snake.
- d. For medium and hard levels food cannot appear on any obstacles either.

### 3. Grid

- a. Grid size can be adjusted.
- b. Grid size equals of rectangle size.

### 4. Obstacles

- a. Snake cannot pass through obstacles.
- b. Game ends when snake hits the obstacles or itself either.