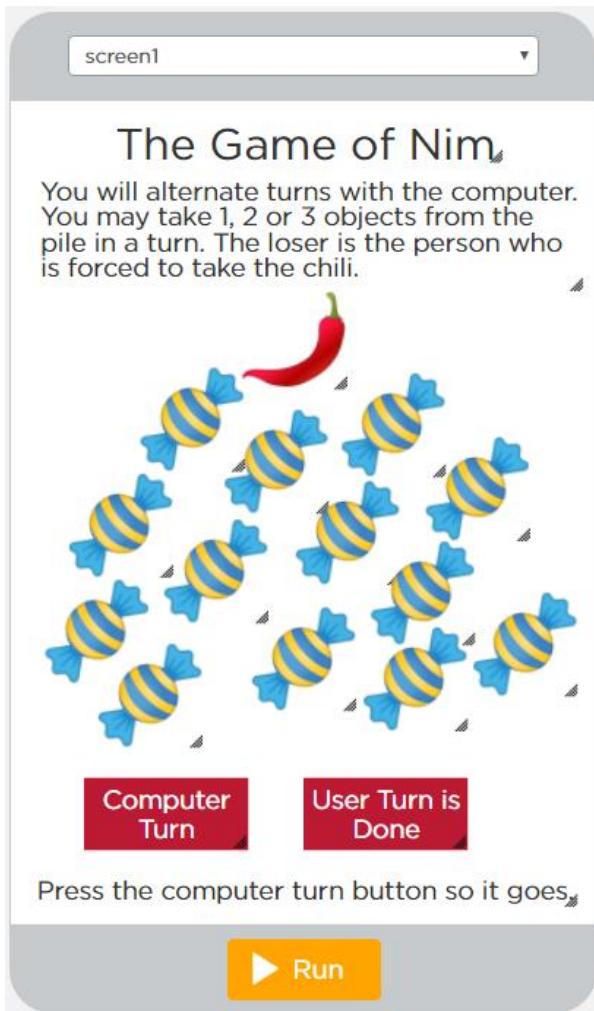# The Game of Nim

Create this screen.

candy.png   chili.png

This game has:
- A title
- Instructions
- 1 chili image (named image1). it is 60 x 60 pixels.
- 13 candy images (named image2 through image14). They are 60 x 60 pixels. Make the first image, put in the picture, resize. THEN choose the duplicate button.
- Two buttons: named computer and user.
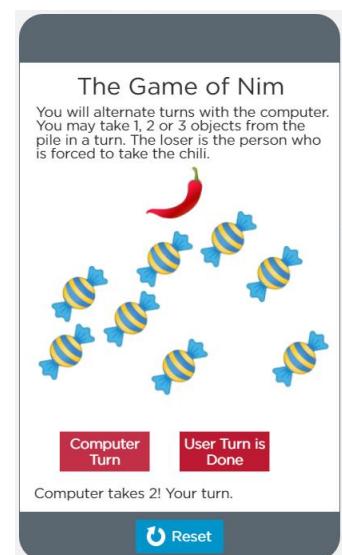- The label at the bottom named result.

Make these global variables.

The list in text format for easy cut and paste:
var list = [0,1,1,1,1,1,1,1,1,1,1,1,1,1];

The list's purpose is to track which candies have been taken and which hasn't so the computer knows.

The computer goes first. You code the part for the computer going first.
- The computer picks one random place and hides it.

Then, the code for the next moves is trickier.
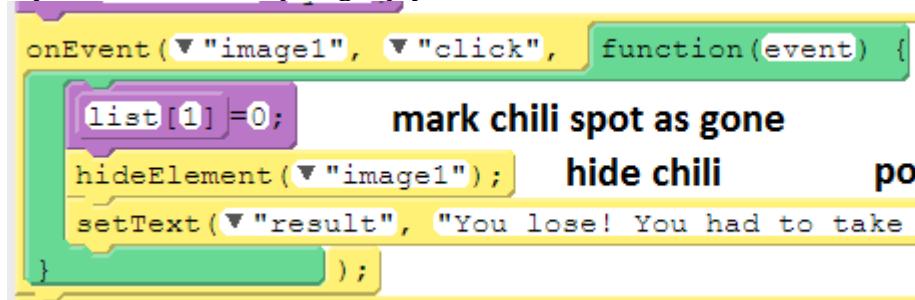- The computer looks for the right number of pictures, that haven't been taken, and it removes them.
- This is the code for the else on down for easy cut and pasting.

```
} else {
  for(var i=0; i<(4-count); i++){
    var place=2;
    while(list[place]==0){
      place++;
    }
    list[place]=0;
    hideElement("image"+place);
  }
}
setText("result", "Computer takes "+(4-count)+"! Your turn.");
count=0;
```

Next, we need to code the chili.
If you take the chili (image1), you lose.

```
onEvent( ▼"image1",  ▼"click",  function(event) {
    list[1] =0;              mark chili spot as gone
    hideElement(▼"image1");     hide chili           point out they lost
    setText(▼"result", "You lose! You had to take the chili.")
}                );
```

Next, we need to code the 13 candies.

```
onEvent( ▼"image2",  ▼"click",  function(event) {
    if( list[2] ==1  && count < 3 ){    if it is there &&
                                            you have less than 3
        list[2] =0;   mark as gone
        count++;      add to your candy count
        hideElement(▼"image2");   hide the candy
    }        +
}                );
```

You need to cut and paste the code for the others, changing the 2's to the other numbers.

Finally, we need to code the user's turn is done section.
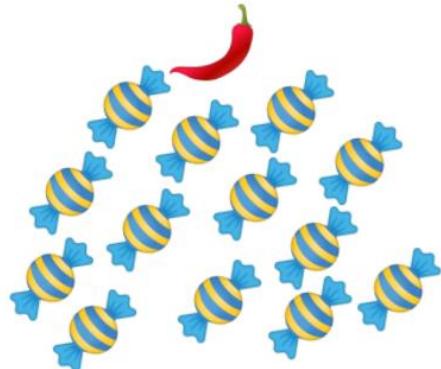
```
onEvent( ▼"user",  ▼"click",  function(event) {
    if( count==0 ){    stops them from cheating - they have to take one
        setText(▼"result", "You haven't taken any. Try again.");
    } else {
        setText(▼"result", "You took "+count +". Click computer turn." );
    }        - +
}                );
```

As an additional task, (for bonus) add a reset button.
It is similar to the reset button in sand castle.

The Game of Nim

You will alternate turns with the computer. You may take 1, 2 or 3 objects from the pile in a turn. The loser is the person who is forced to take the chili.

Computer Turn **User Turn is Done**

Press the computer turn button so it goes.

↻ Reset

The Game of Nim

You will alternate turns with the computer. You may take 1, 2 or 3 objects from the pile in a turn. The loser is the person who is forced to take the chili.
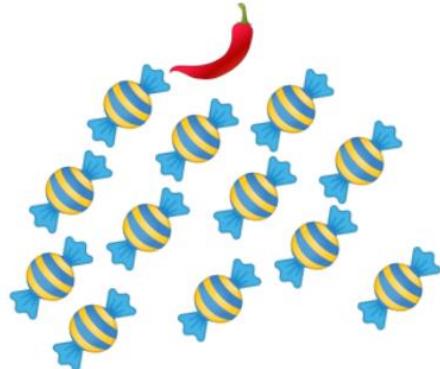
Computer Turn **User Turn is Done**

Computer takes 1! Your turn.

↻ Reset

The Game of Nim

You will alternate turns with the computer. You may take 1, 2 or 3 objects from the pile in a turn. The loser is the person who is forced to take the chili.
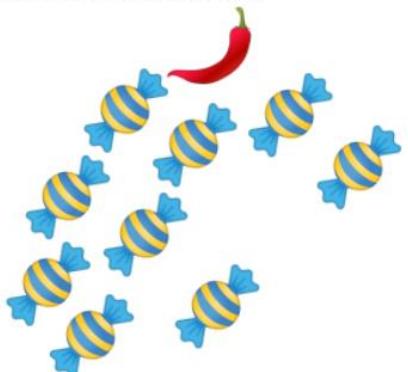
Computer Turn **User Turn is Done**

You took 3. Click computer turn.

↻ Reset

The Game of Nim

You will alternate turns with the computer. You may take 1, 2 or 3 objects from the pile in a turn. The loser is the person who is forced to take the chili.
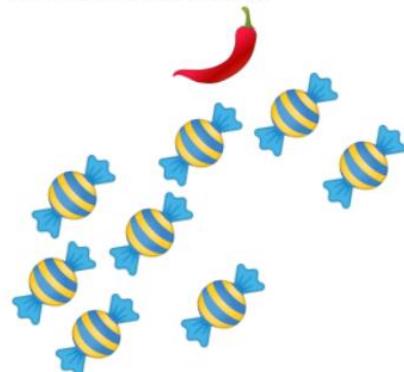
Computer Turn **User Turn is Done**

Computer takes 1! Your turn.

↻ Reset