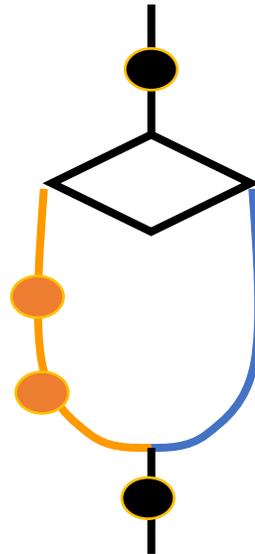


My Best Game Version 2

Revising Condition Starts Action

If partner touches shoulder
wave hand

Stand
If partner waves once
Bow
clap
Sit



Do you remember condition starts action algorithms?

Revising Condition Starts Action

Conditions start with if



If partner touches shoulder



wave hand



Stand

If partner waves once

Actions started by a condition are indented

Bow
clap

Sit

Conditions are only checked once!

Revising Condition Starts Action

Conditions start with if

If partner touches shoulder
wave hand

Conditions start action in code

```
ask Do you like me? Yes, No? and wait
if answer = Yes then
  say We can be best friends for 2 seconds
if answer = No then
  say You have made me sad! for 2 seconds
```

Stand

If partner waves once

Actions started by a condition are indented

Bow
clap

Sit

Revising Condition Switches Between Actions

If partner stands

 bow

Else

 clap

If partner says pig

 stamp foot once

Else

 grin

Do you remember
condition switches
between actions
algorithms?

Revising Condition Switches Between Actions

↓
If partner stands

bow ←

Else

clap ←

Conditions are only checked once!

If partner says pig
stamp foot once

Actions started by a condition being **true** are indented

Else

grin
Actions started by a condition being **false** are indented

Revising Condition Switches Between Actions

If partner stands

bow

Else

clap

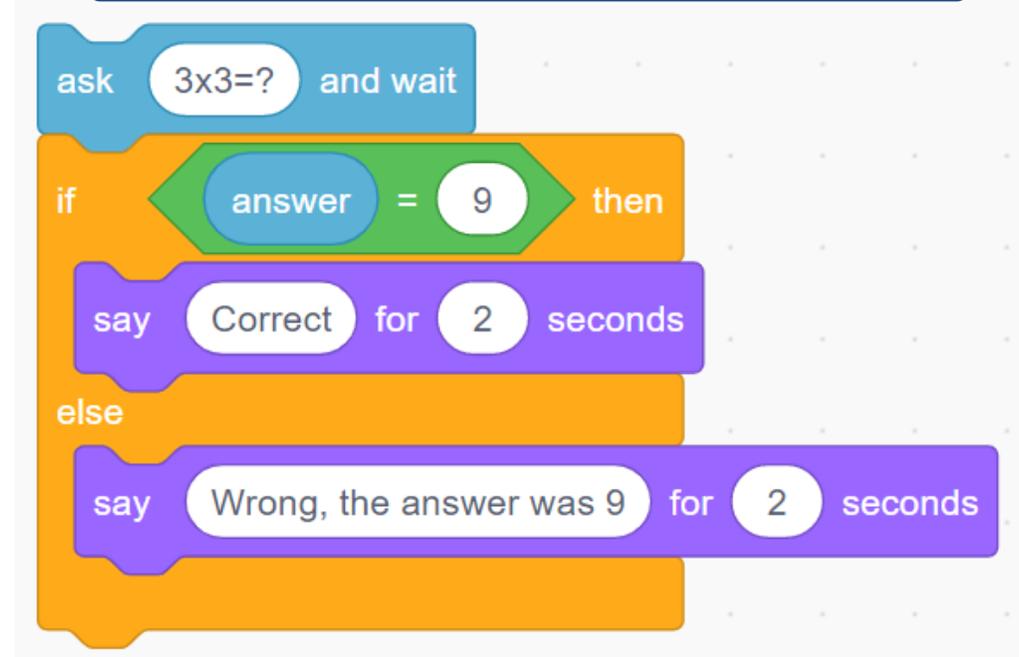
If partner says pig

stamp foot once

Else

grin

Condition switches between actions in code



```

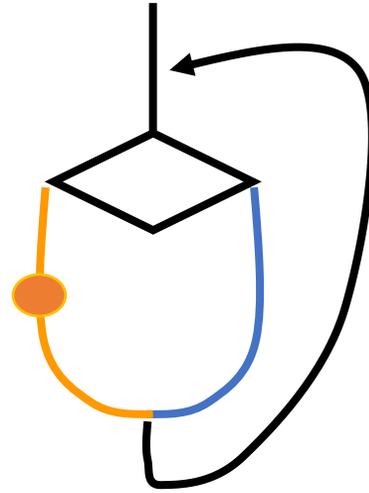
ask 3x3=? and wait
if answer = 9 then
  say Correct for 2 seconds
else
  say Wrong, the answer was 9 for 2 seconds
  
```

Loops and Conditional Selection

Condition starts action

Loop always

if touch shoulder
turn right 90 degrees



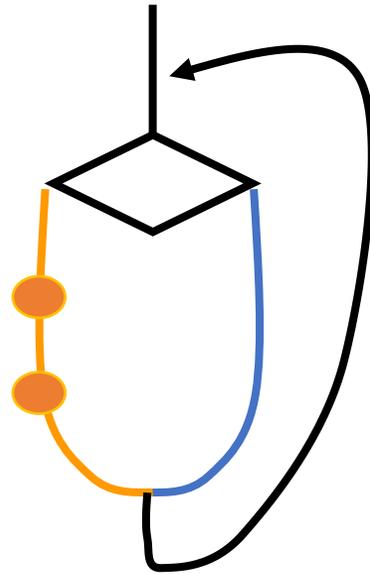
Conditions is checked many times because of the loop

Loops and Conditional Selection

Condition starts action

Always loop

if partner clap
jump once
bow once



Conditions is checked many times because of the loop

Loops and Conditional Selection

Condition starts action

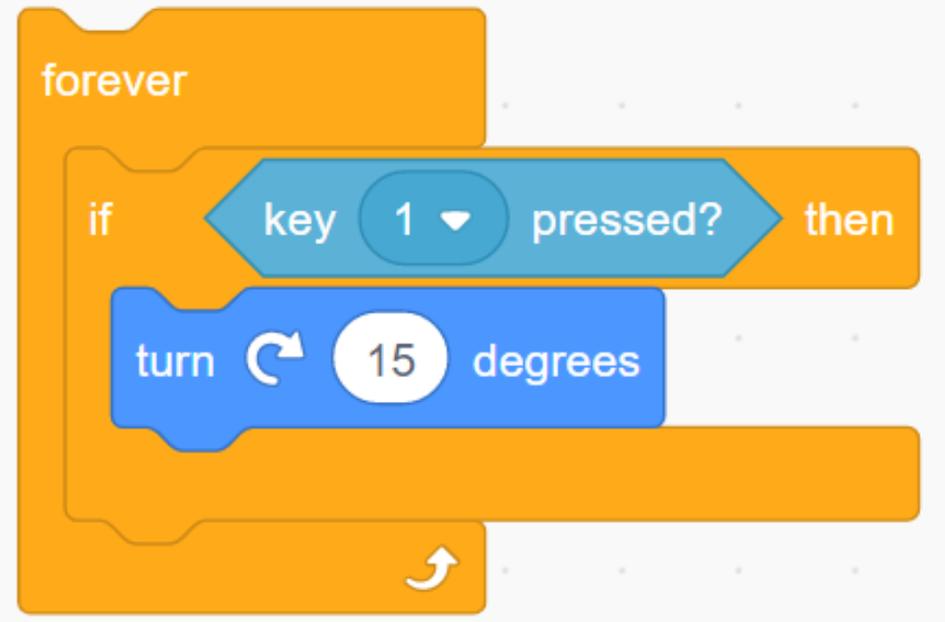
Always loop

if partner clap

jump once

bow once

Conditions checked
inside a loop in code



```
forever loop
  if key 1 pressed? then
    turn 15 degrees
```

Loops and Conditional Selection

Condition switches between actions

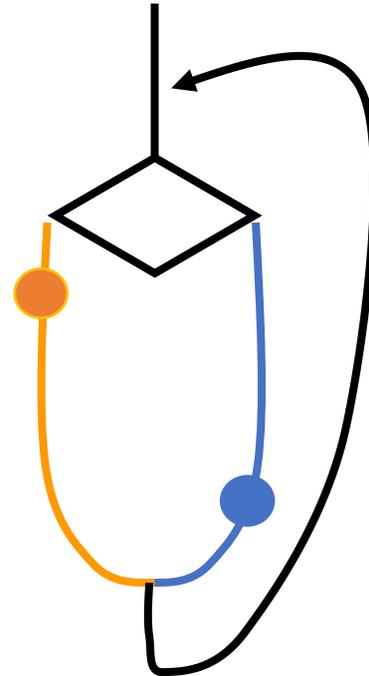
Loop always

if touch shoulder

turn right 90 degrees

else

turn left 90 degrees



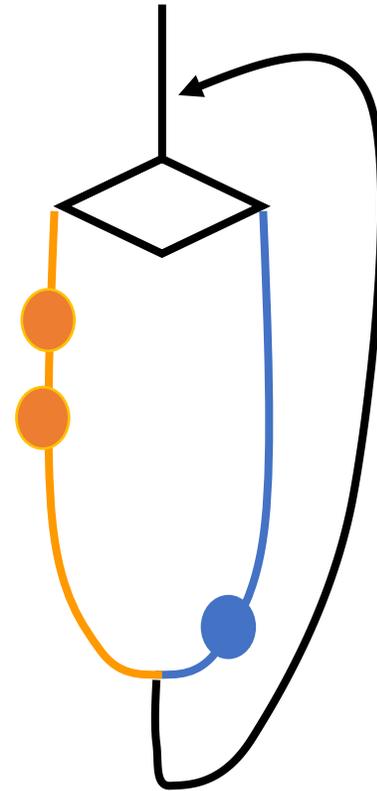
Conditions is checked many times because of the loop

Loops and Conditional Selection

Condition switches between actions

Always loop

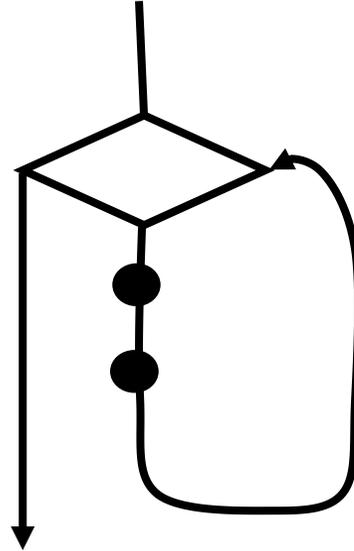
```
if partner clap
    jump once
    bow once
else
    wave
```



Conditions is checked many times because of the loop

Condition stops repeated action

Loop until partner says boo
nod head
shake head



Loop until partner claps
move one step forward
move one step backwards

These loops are stopped by a condition

Condition stops repeated actions

Loop until partner says boo

nod head

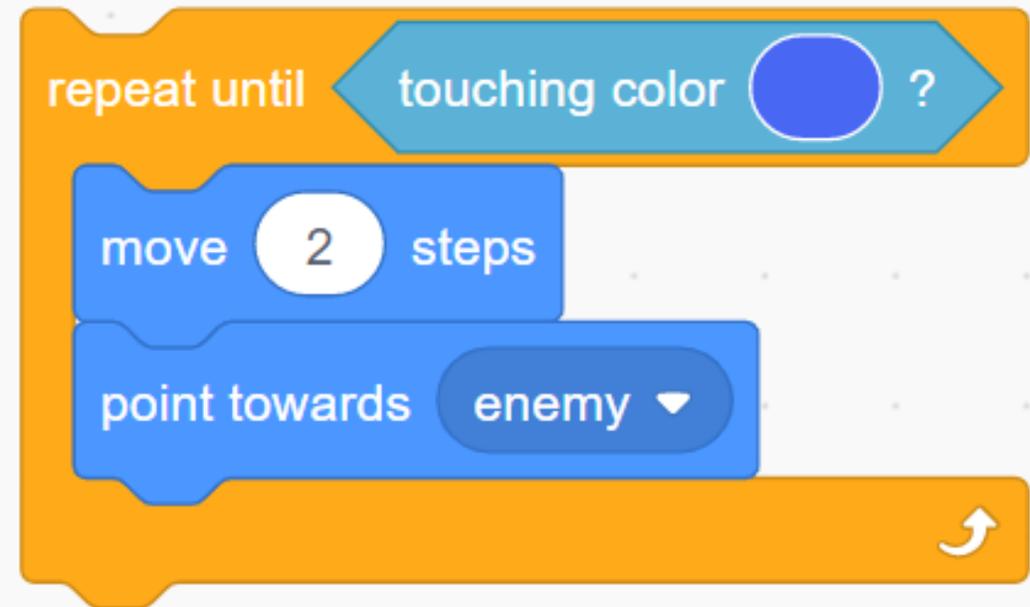
shake head

Loop until partner claps

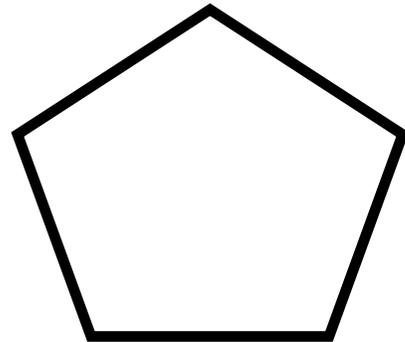
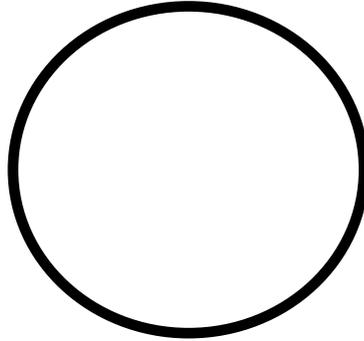
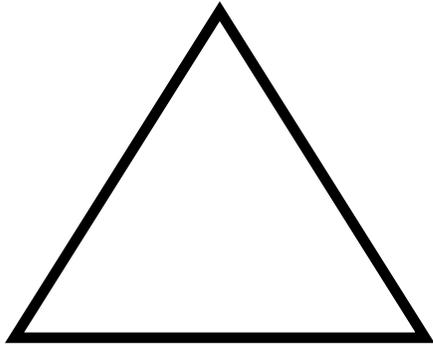
move one step forward

move one step backwards

Condition stops repeated actions in code



Shapes Game

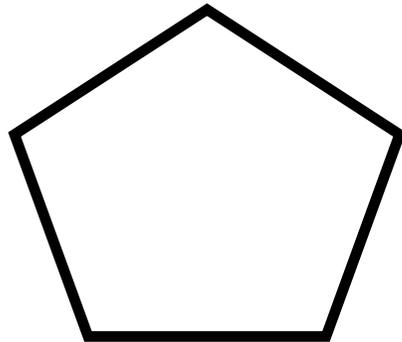
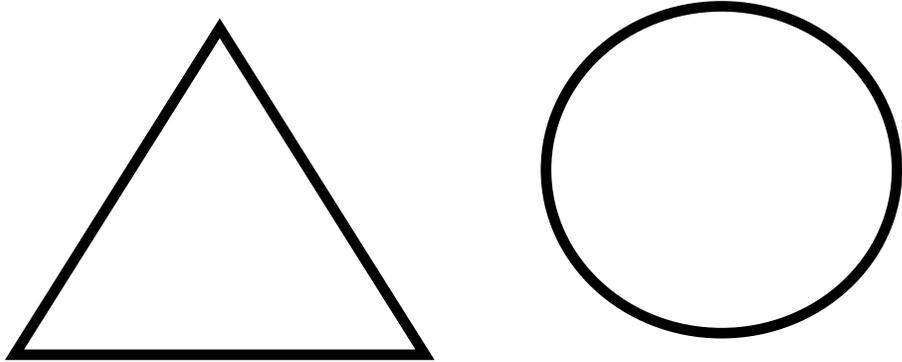


Always loop
if touching circle
hum

loop until touching pentagon
wave hands high in air

Always loop
if touching triangle
hop
else
walk normally

Shapes Game



Always loop

if _____

loop until _____

Always loop

if _____

else _____

Task Level

- What will your game do?
- Keep it short

Examples

Bob will have to go through the maze without touching anything. If he touches the maze walls or enemies he will go back to the start.

You have to steer crab to find food. Shark will swim and try and catch crab. If crab gets food the food will disappear.

Dancer has to dance away from other dancers who dance in patterns. If dancer hits other dancers the game ends. There will be music.

Design Level –What will it do?

- Draw a picture of the screen (stick people NOT art work)



Where will characters start
on the screen? Initialisation

Design Level –What will it do?

- What objects / characters will your game have?
- List all things each object will do?

Bob

Move button
Steer right button
Steer left button
If hit enemies back to start

Enemies

Glide to in loop
Start position

Maze gate

Move back and forwards

Crab

Auto move
Steer right button
Steer left button
If hit shark end game

Shark

Auto move slow
Point towards crab

Dancer

Up arrow point up move up
Down arrow point down move down
Right arrow point right move right
Left arrow point left move left

Other dancers

Move on set route
Start position
New dancers add after time

Design Level –What will it do?

Algorithm writing

