

iProgram

Learning

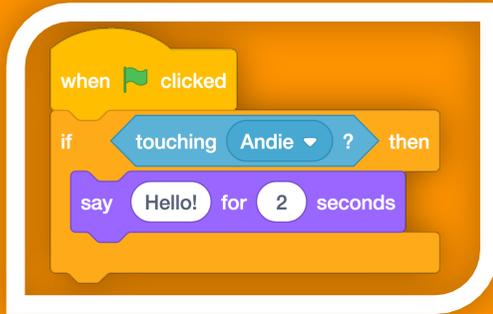
- To program a computer game by sequencing conditional statements
- To use variables in programs
- To use procedures in programs
- To understand that the behaviour of a computer program should be planned
- To understand that programs are developed according to a plan
- To develop strategies for testing and debugging computer programs

Key Vocabulary

Sequence	A particular order to follow
Selection	Programming statements that only run under certain conditions (e.g. WHEN, IF, WHILE and UNTIL)
Condition	Something that is true or false
Repeat	The action of doing something over and over again
Boolean	A value that can only be true or false
Variable	Names given to things we want a computer to store (remember)
Procedure	A piece of code that can be used more than once
Test	Systematically execute a program in all possible ways to see if it does what you expect it to
Debug	Correct errors in programs

iProgram

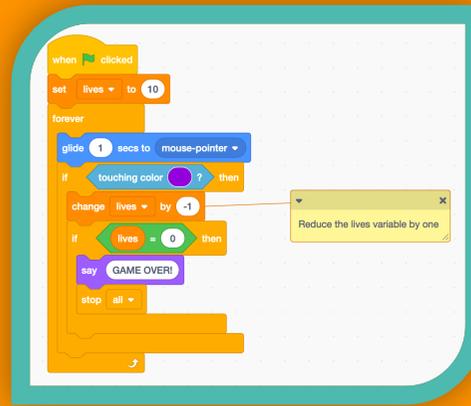
Conditions



```

when clicked
  if touching Andie? then
    say Hello! for 2 seconds
  
```

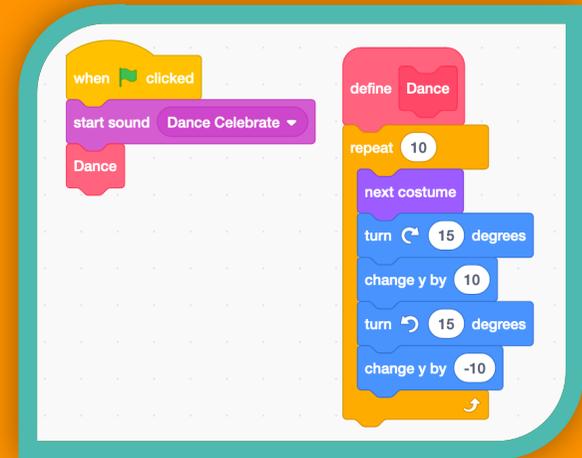
Variables



```

when clicked
  set lives to 10
  forever
    glide 1 secs to mouse-pointer
    if touching color? then
      change lives by -1
      if lives = 0 then
        say GAME OVER!
        stop all
  
```

Procedures



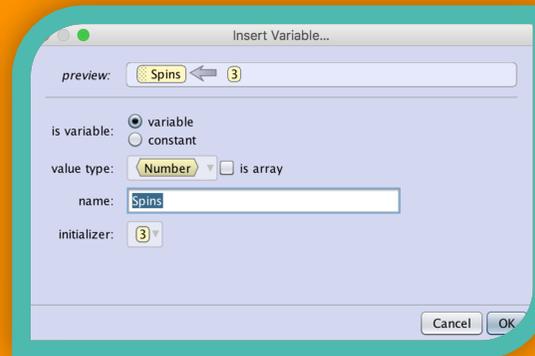
```

when clicked
  start sound Dance Celebrate
  Dance
define Dance
  repeat 10
    next costume
    turn 15 degrees
    change y by 10
    turn 15 degrees
    change y by -10
  
```



```

Repeat 5 times
  Do together
    PajamaFish swim
    Shark swim
  If PajamaFish is near? Shark is true Then
    PajamaFish move away from Shark 3.0 meters
  Else
    PajamaFish move toward Shark 1.0 meters
  loop
  
```




```

Do together
  Alice say "Welcome to My Story!"
  Alice move FORWARD 3.0 meters
  
```