

2a. The programming language used to create my game is the language of scratch. It is a basic language that can also be complicated depending on what you are trying to do with the code. The purpose of my program is to make a person get sucked into a black hole while hes bouncing on a trampoline while on a basketball court. He then has to go through a very complicated maze while collecting a good disease and running away from a shark. Once the exits are unlocked, the player has to choose which exit is the right one. The video shows my code working.all together.

2b. My program is actually a remix of a game that I made earlier in the year. I changed all the characters and most of the sprites. The only thing I kept the same was the maze. I made most of this game by myself, created the codes by myself, but I had some help with the codes to make the AI from a friend. I also got the sprites from the pre created ones in scratch itself.

3b.



This section of my code is probably the most important section of my code. It makes it so whenever one of the arrow keys are pressed, it moves the character by a certain amount.

2d.





This is my codes abstraction. The part that says touching color [] then go to x: “last x” y: “last y” makes it so you can't go through the walls when you are inside the maze. The other section of the code sets the two variables up. When the player gets to the maze, it forever sets them to the characters current position. So if they touch a wall, they are seamlessly sent back to their most recent position. This makes the illusion as if the player hadn’t moved at all.

All of my code shown below

```

when clicked
  set Good Disease to 0
  set End to False
  hide variable Good Disease
  show
  switch costume to amon3
  switch backdrop to basketball-court1
  set x to 0
  set y to -60
  forever
    if key down arrow pressed? then
      change y by 10
    if key up arrow pressed? then
      change y by -10
    if touching black hole ? then
      switch backdrop to Maze 1
    if touching black hole ? then
      broadcast Whoosh
      stop this script
    if key right arrow pressed? then
      switch costume to amon3
    if key left arrow pressed? then
      switch costume to amon4
  
```

```

when backdrop switches to Maze 1
  set Good Disease to 0
  show
  go to front
  switch costume to amon
  set x to -184
  set y to 116
  wait 2 secs
  forever
    if key down arrow pressed? then
      change y by 10
    if key up arrow pressed? then
      change y by -10
    if key left arrow pressed? then
      change x by -10
      switch costume to amon2
    if key right arrow pressed? then
      change x by 10
      switch costume to amon
    if touching color ? then
      go to x: last x y: last y
    if touching Arrow1 ? then
      broadcast Whoosh and wait
      switch backdrop to Tvier1
      set x to 0
      set y to 0
    if touching Arrow2 ? then
      broadcast Whoosh and wait
      switch backdrop to The End
      set x to 0
      set y to 0
    if touching Shark ? then
      broadcast dead
      stop this script
  
```

```

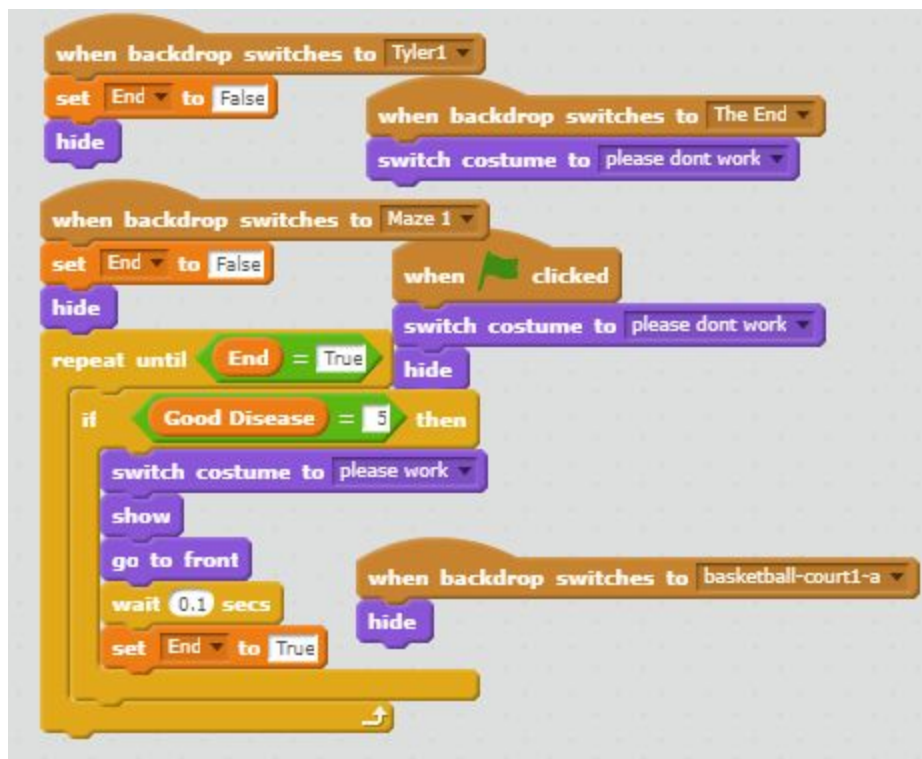
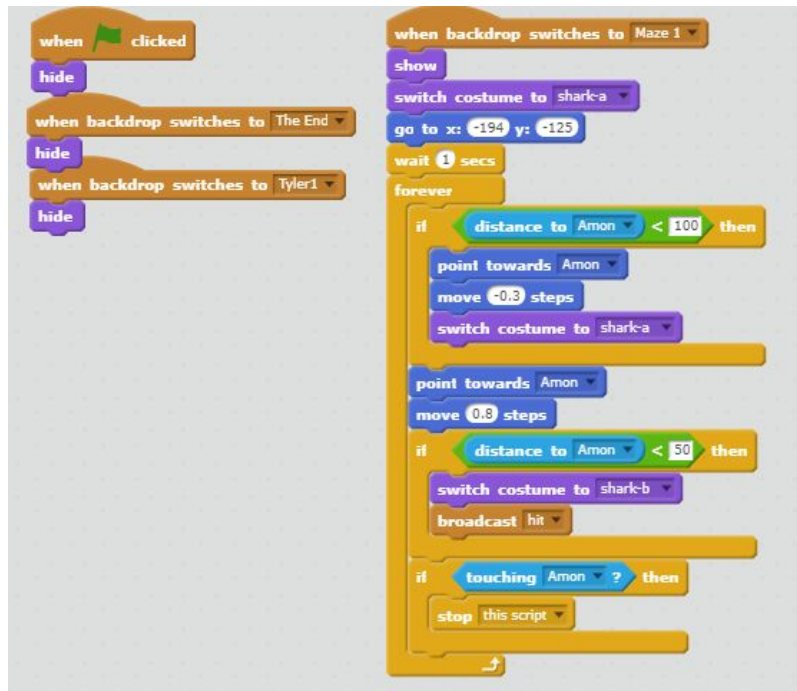
when I receive dead
  set Good Disease to 0
  set End to False
  switch backdrop to Maze 1
  show
  go to front
  switch costume to amon
  set x to -184
  set y to 116
  wait 2 secs
  forever
    if touching color ? then
      go to x: last x y: last y
    if touching Arrow1 ? then
      broadcast Whoosh and wait
      switch backdrop to Tvier1
      set x to 0
      set y to 0
    if touching Arrow2 ? then
      broadcast Whoosh and wait
      switch backdrop to The End
      set x to 0
      set y to 0
    if touching Shark ? then
      broadcast dead
  
```

```

when backdrop switches to Maze 1
  forever
    set last x to x position
    set last y to y position
    show variable Good Disease
  
```

```

when backdrop switches to basketball-court1
  forever
    if y position of Amor < 50 then
      set y to 50
    if touching black hole ? then
      stop this script
  
```




```

when backdrop switches to Maze 1
hide

when backdrop switches to Tyler1
hide

when backdrop switches to basketball-court1-a
show

```

```

when backdrop switches to The End
hide
when backdrop switches to basketball-court1-a
hide

when backdrop switches to Maze 1
show
when backdrop switches to Tyler1
hide

```

```

when green flag clicked
switch costume to Hide 1
hide

when backdrop switches to Tyler1
set End to False
hide

when backdrop switches to Maze 1
set End to False
hide

repeat until End = True
  if Good Disease = 5 then
    switch costume to Shown 1
    show
    go to front
    wait 0.1 secs
    set End to True

when backdrop switches to basketball-court1-a
hide

when backdrop switches to The End
switch costume to Hide 1

```

```

when backdrop switches to Tyler1
hide

when green flag clicked
show
set x to -1
set y to 45

when backdrop switches to Maze 1
hide

```

```

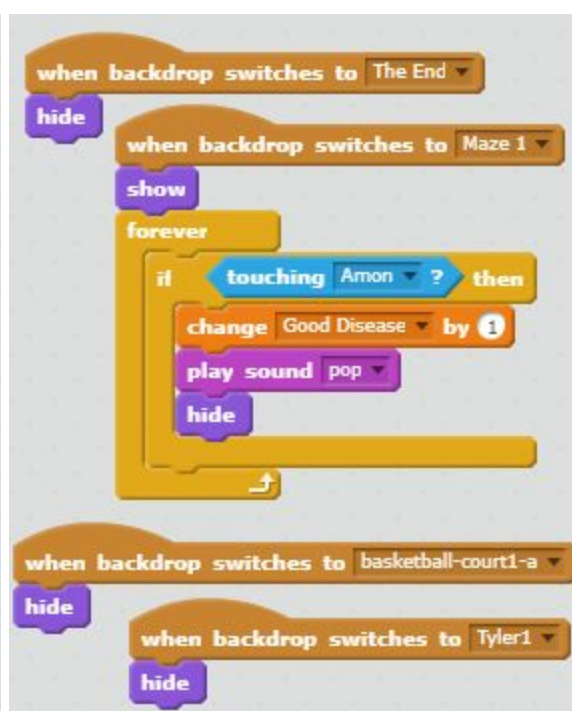
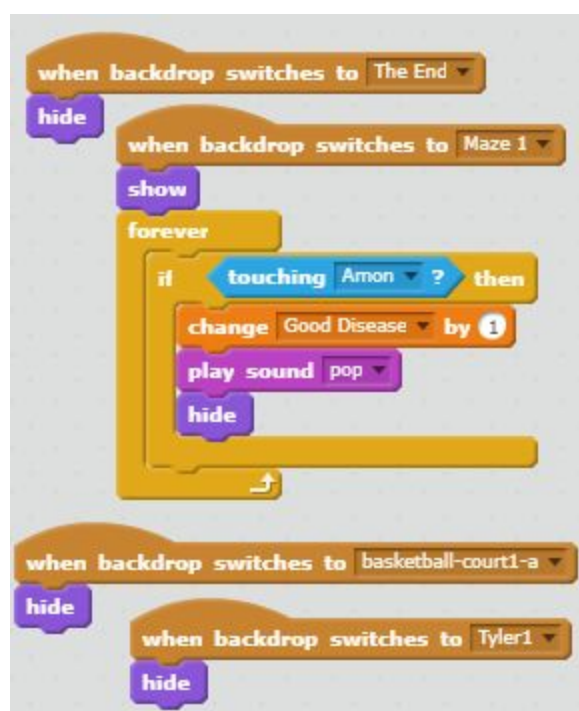
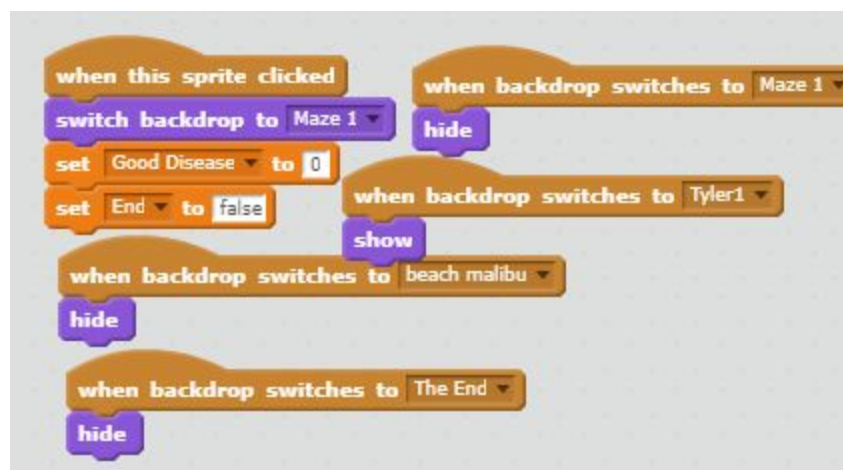
when backdrop switches to Tyler1
hide

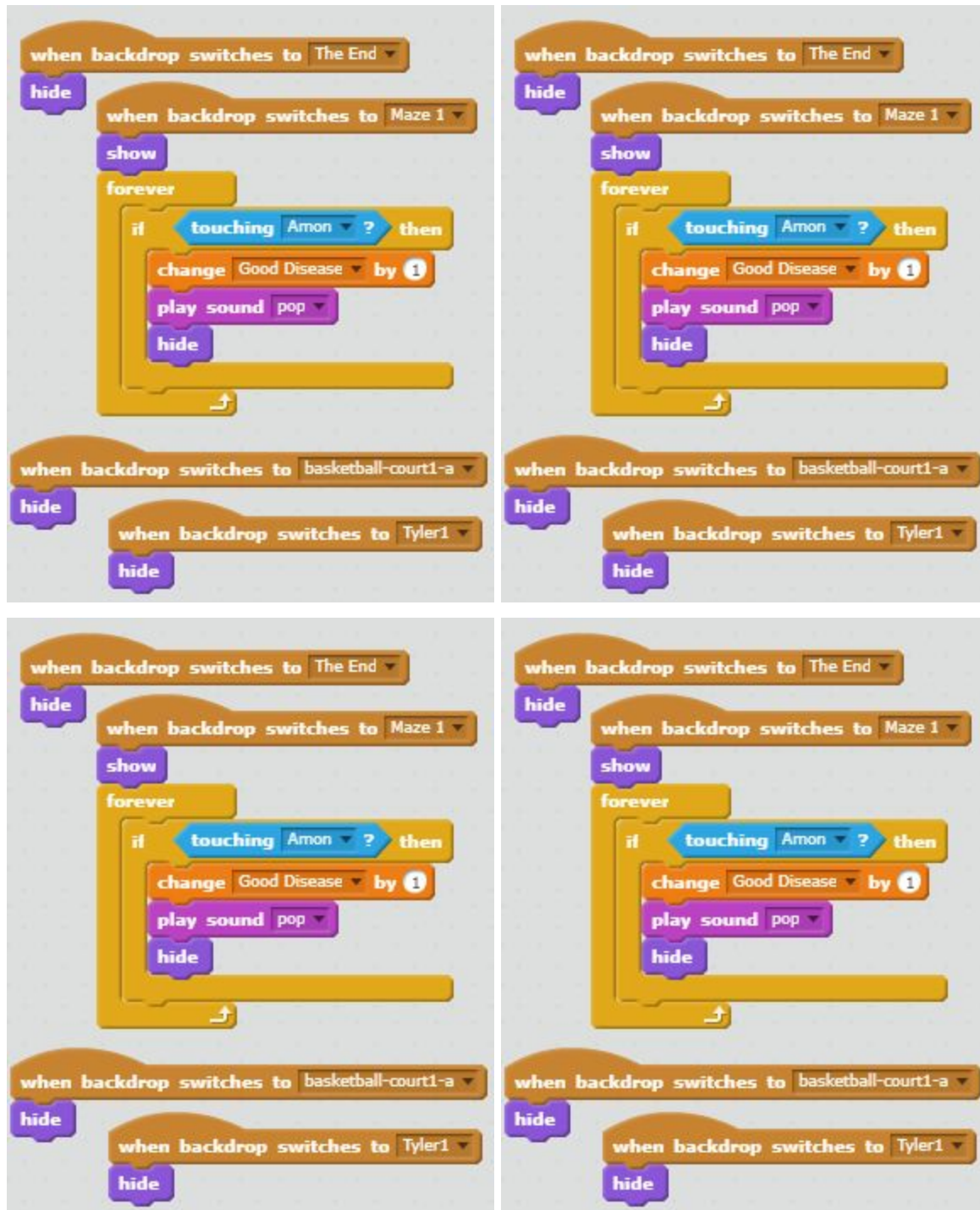
when backdrop switches to basketball-court1-a
hide

when backdrop switches to Maze 1
show

when backdrop switches to The End
hide

```





(6 of these because 6 sprites all with the same code inside.

