2a.

Some difficulties that I had while making my scratch project was finding a good project that I knew that knew that I would enjoy messing with and I also didn't know some tools to use and I learned something I didn't know about. Also there was some glitches that I didn't know about until my colleagues played it.

```
define touching ground? up? down?

if  gravity? = normal  then
    if  touching color [ ] ?  then
        repeat until  not  touching color [ ] ?
            if  up?  then
                change y by -1
            else
                change y by 1
                set y speed to 0
                set jumping? to 0

if  gravity? = upsidedown  then
    if  touching color [ ] ?  then
        repeat until  not  touching color [ ] ?
            if  down?  then
                change y by 1
            else
                change y by -1
                set y speed to 0
                set jumping? to 0


when [flag] clicked
forever
    set gravity? to normal
    wait until  key space pressed?
    wait until  not  key space pressed?
    set gravity? to upsidedown
    wait until  key space pressed?
    wait until  not  key space pressed?


when [flag] clicked
forever
    if  touching color [magenta] ?  then
        repeat until  not  touching color [magenta] ?
            set gravity? to normal
    if  touching color [blue] ?  then
        repeat until  not  touching color [blue] ?
            set gravity? to upsidedown


when [flag] clicked
forever
    if  x position > 220  then
        if  level = 15  then
            stop other scripts in sprite
            set score to  time * deaths + 1
            if  score < [High score.]  and  not  username = smileyguy13  then
                set [High score.] to score
```

x: -1
y: -7

```
when [flag] clicked
go to front
go to x: (-215) y: (-156)
set [level v] to [1]
set [gravity? v] to [normal]
set [y speed v] to [0]
set [x speed v] to [0]
hide variable [High score. v]
hide variable [score v]
set [deaths v] to [0]
set [time v] to [0]
hide variable [deaths v]
hide variable [time v]
forever
    if < (gravity?) = [normal] > then
        change [x speed v] by ((x speed) * (-0.3))
        change [y speed v] by (-1)
        change y by (y speed)
        walk (x speed) (direction)
        < touching ground? > < (y speed) > [0] > < (y speed) < [0] >
        if < not < touching color [ ] ? > > then
            if < key [right arrow v] pressed? > then
                change [x speed v] by (3)
                if < (x speed) = [18] > then
                    set [x speed v] to [15]
            if < key [left arrow v] pressed? > then
                change [x speed v] by (-3)
                if < (x speed) = [-18] > then
                    set [x speed v] to [-15]
            if < key [up arrow v] pressed? > then
                if < (jumping?) = [0] > then
```

```
set [slope v] to [0]
```

```
define walk (speed) (direction)
if < (direction) = [90] > then
    change x by (speed)
if < (direction) = [-90] > then
    change x by ((speed) * (-1))
if < (gravity?) = [normal] > then
    repeat until < < (slope) = [8] > or < not < touching color [ ] ? > > >
        change y by (1)
        change [slope v] by (1)
    if < (slope) = [8] > then
        change y by ((0) - (slope))
        if < (direction) = [90] > then
            change x by ((speed) * (-1))
        if < (direction) = [-90] > then
            change x by (speed)
    set [slope v] to [0]
if < (gravity?) = [upsidedown] > then
    repeat until < < (slope) = [-8] > or < not < touching color [ ] ? > > >
        change [slope v] by (-1)
        change y by (-1)
    if < (slope) = [-8] > then
        change y by ((0) - (slope))
        if < (direction) = [90] > then
            change x by ((speed) * (-1))
```