

## Challenge 2 - Solution

Extract sprites from a larger png file such as the one we can find at <http://gaurav.munjhal.us/Universal-LPC-Spritesheet-Character-Generator/> The picture below is showing one of the sprite collection.

### Hints:

- You can read and convert a PNG into a form (a graphics pharo basic element) using `PNGReadWriter`.
- Use `asFileReference` or `FileSystem workingDirectory` if the file is located close to the pharo.image file to get to a file.
- You can use the message `/` to specify a file name in the path.
- Pay attention the stream should be binary.
- You can access the size of a form using message `width` and `height`.
- You can copy a part of a form using the message `form copy: aRectangle`.
- Looking at the results of expressions with the inspector is a great idea.

### Solution

```
| form sprites |
form := 'images/Sprites.png' asFileReference
  binaryReadStreamDo: [ :stream | PNGReadWriter formFromStream:
    stream ].
sprites := OrderedCollection new.
0 to: (form width - 64) by: 64 do: [ :x |
  0 to: (form height - 64) by: 64 do: [ :y |
    sprites add: (form copy: (x@y corner: (x+64)@(y+64)))].
```

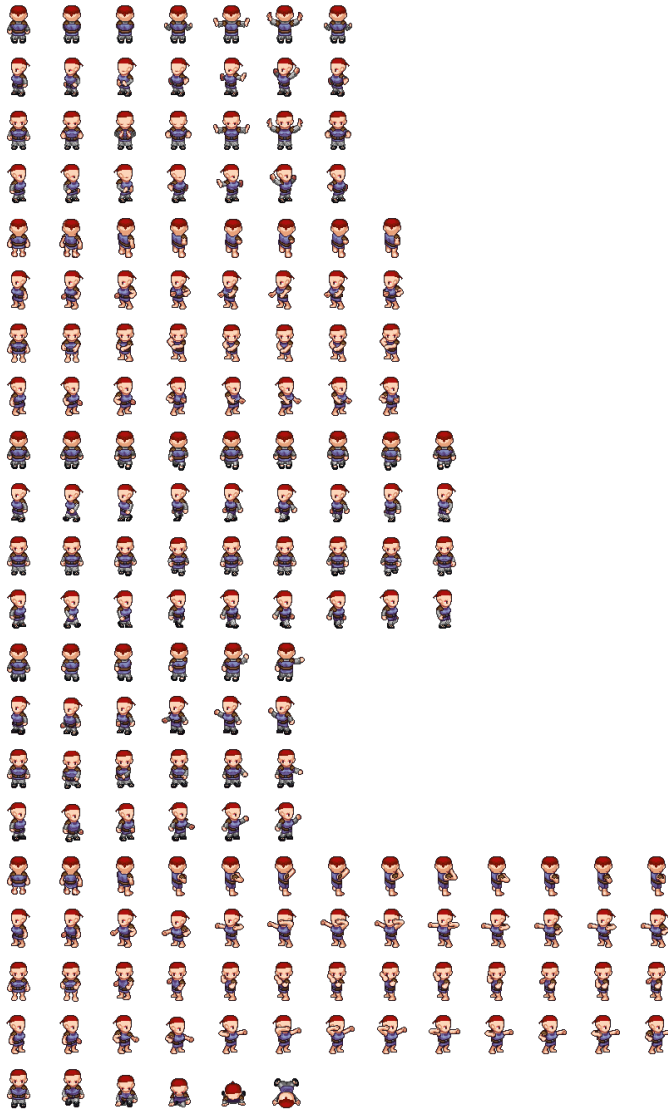


Figure 1.1

sprites