

Often, you have set of data, you need to put in several arrays. For example, in a demo, for each effect you could have init address (2 bytes), run address (2 bytes), and number of frames to run.

One easy way to group these together is by using segments.

First, add segments to your config file, as usual:

```
SEGMENTS
{
    INITLO: load=RAM1, type=ro;
    ...
}
```

Secondly, add labels at the beginning of each segment. NOTE: It's critical this is done before putting any data in them!

```
.segment "INITLO"
InitLo:
.segment "INITHI"
InitHi:
.segment "RUNLO"
RunLo:
.segment "RUNHI"
RunHi:
.segment "NUMFRAMES"
NumFrames:
```

Thirdly, create a macro, that takes all related information as arguments:

```
.macro RegisterEffect init, run, numframes
    .segment "INITLO"
    .byte <init
    .segment "INITHI"
    .byte >init
    .segment "RUNLO"
    .byte <run
    .segment "RUNHI"
    .byte >run
    .segment "NUMFRAMES"
    .byte numframes
    ;.segment "EMPTY"
.endmacro
```

This becomes more powerful, when you use given information to automatically calculate entries for other arrays.

NOTE: It's advised to add [Safeguard against putting data in wrong segment](#) at the end of macro!

Then fourthly, populate your arrays:

```
RegisterEffect plasmainit, plasmarun, 200
```

```
RegisterEffect invaderinit, invaderrun, 50
RegisterEffect realtimeraytraceinit, realtimeraytracerun, 250
```

Oh, and fifthly, use array contents in your code. The entries will be in the order they were linked in.

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