

Submission 8

8.1.2

```
0000000000000000 <copy_c>:
 0: a9401807    ldp    x7, x6, [x0]
 4: a9411005    ldp    x5, x4, [x0, #16]
 8: a9420803    ldp    x3, x2, [x0, #32]
c: f9401800    ldr    x0, [x0, #48]
10: a9001827    stp    x7, x6, [x1]
14: a9011025    stp    x5, x4, [x1, #16]
18: a9020823    stp    x3, x2, [x1, #32]
1c: f9001820    str    x0, [x1, #48]
20: d65f03c0    ret
```

0-c: copies first 7 elements into temp variables; uses ldp to save instructions copying 2 values at once

10-1c: writes the temp variables into the array b; uses stp to save instructions copying 2 values at once

20: returns

8.2.2

```
0000000000000000 <add_c>:
 0: b4000120    cbz    x0, 24 <add_c+0x24>
 4: d2800004    mov    x4, #0x0                                // #0
 8: f8647825    ldr    x5, [x1, x4, lsl #3]
c: f8647846    ldr    x6, [x2, x4, lsl #3]
10: 8b0600a5    add    x5, x5, x6
14: f8247865    str    x5, [x3, x4, lsl #3]
18: 91000484    add    x4, x4, #0x1
1c: eb04001f    cmp    x0, x4
20: 54ffff41    b.ne   8 <add_c+0x8>    // b.any
24: d65f03c0    ret
```

0: if (i_n_value == 0) returns [otherwise checks at the end of loop]

4: i = 0

8-14: load variables of a[i] / b[i] (lsl #3 because 64bit) into temp registers, to then add them together in the first (temp1 = temp1 + temp2) and writes it in c[i]

18: i = i+1

1c-24: repeats loop while i<i_n_values, otherwise returns