```cpp
#include <iostream>
using namespace std;

int main(void) {
    int arr[10] = {0,1,2,3,4,5,6,7,8,9};
    for(int i = 0; i < 9; i++)
        arr[i+1] = arr[i] + arr[i+1];
}
```

Figure 1: Prefix Sum in C++

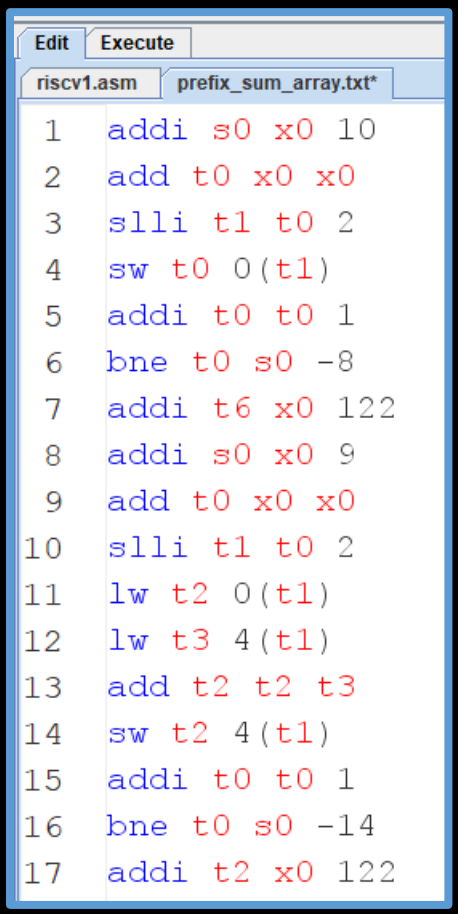

Figure 2: Prefix Sum in RISC-V

```
0 1 3 6 10 15 21 28 36 45
```

Figure 3: Expected Results

0	0	0	0	0
4	1	0	0	0
8	3	0	0	0
12	6	0	0	0
16	10	0	0	0
20	15	0	0	0
24	21	0	0	0
28	28	0	0	0
32	36	0	0	0
36	45	0	0	0

Figure 4: Actual Results

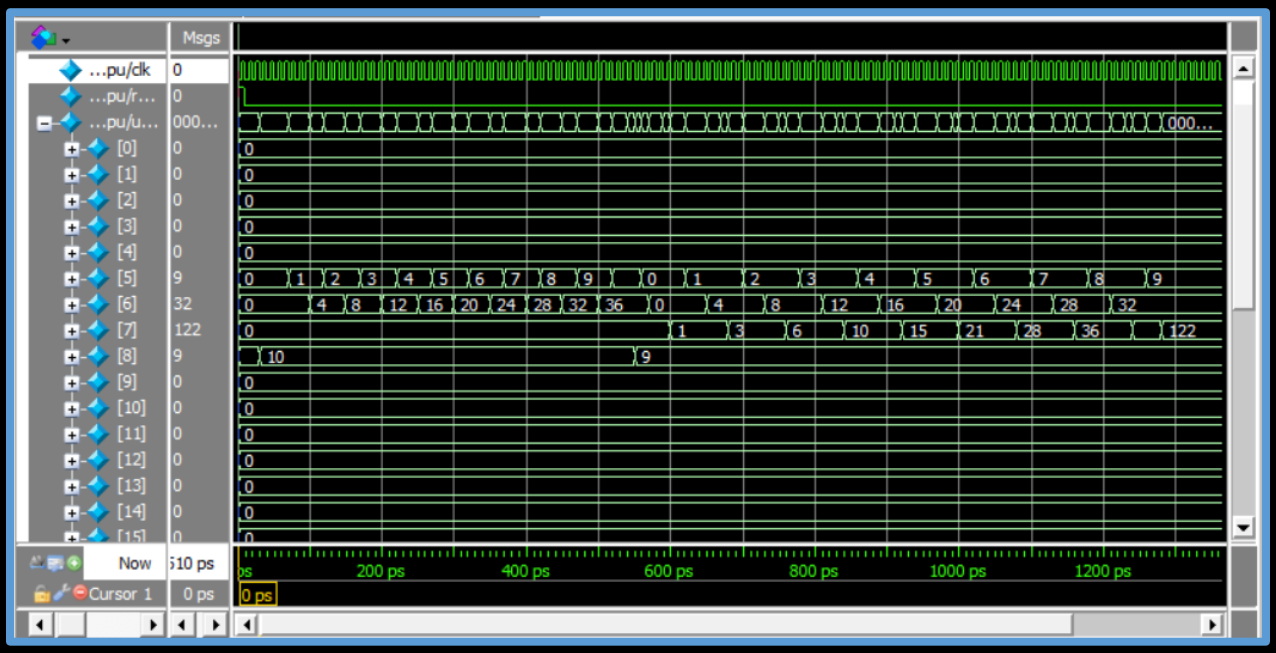

Figure 5: Register File

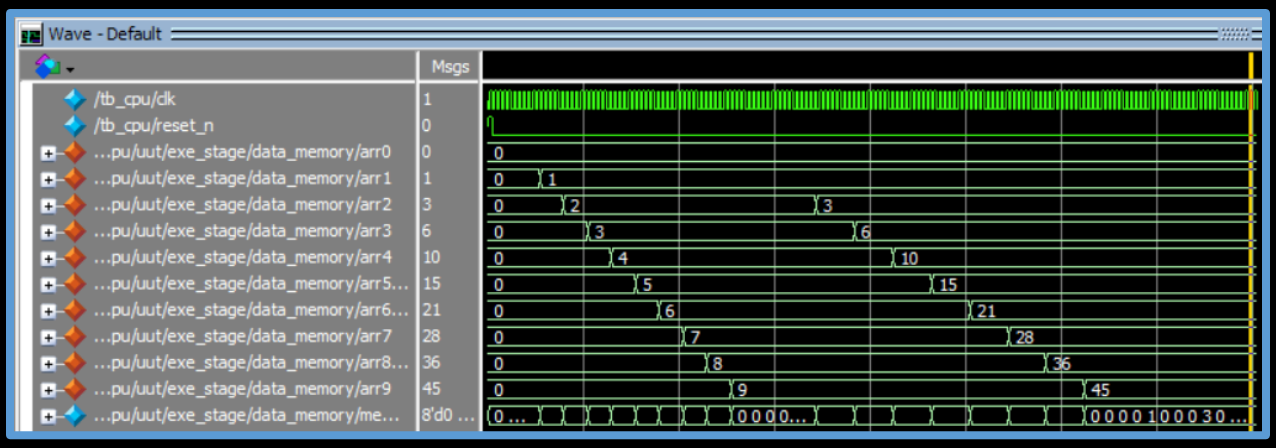

Figure 6: Data Memory

```
 0  13 28 00 40
 4  33 00 00 28
 8  93 08 40 31
12  23 01 8a 01
16  13 04 40 29
20  e3 e0 51 f9
24  13 e8 01 f8
28  13 24 00 40
32  33 00 00 28
36  93 08 40 31
40  03 01 80 39
44  03 11 80 e1
48  33 00 f8 39
52  23 11 8e 01
56  13 04 40 29
60  e3 c8 51 f9
64  13 e8 01 38
```

Figure 7: Instruction Memory