```
High-level
                swap(int v[], int k)
language
                {int temp;
program
                  temp = v[k];
(in C)
                  v[k] = v[k+1];
                  v[k+1] = temp;
                }
                  Compiler
Assembly
                swap:
language
                    multi $2, $5,4
                         $2, $4,$2
program
                     add
                         $15, 0($2)
(for MIPS)
                     lw
                         $16, 4($2)
                     lw
                         $16, 0($2)
                     SW
                         $15, 4($2)
                     SW
                         $31
                     jr
                 Assembler
Binary machine
           000000010100010000000100011000
           000000010000010000100000100001
language
program
           100011011110001000000000000000000
(for MIPS)
```