

Part 1:

// (1)

/*

local A B in

 A = false()

 local C in

 C = true

 if C then

 skip Browse A

 else

 local D in

 D = B

 if D then

 skip Basic

 else

 skip Basic

 end

 end

 end

end

case A of tree() then skip Basic end

case A of false() then skip Basic end

case A of true then skip Basic

else

 skip Basic

end

end

*/

// (2)

/*

local A in

 A = 2

 local B in

 local C D in

 C = A

 D = 1

 {Eq C D B}

 if B then

 skip Basic

 else

```

                                skip Basic
                            end
                        end
                    end
                end
            local B in
                local C D in
                    C = A
                    local E F in
                        E = 3
                        F = 1
                        {IntMinus E F D}
                        {Eq C D B}
                        if B then
                            skip Browse A
                        else
                            skip Basic
                        end
                    end
                end
            end
        end
    end
end
*/
/*
// (3)
local X Y in
    local T in
        local A B in
            A = 3
            B = T
            T = tree(1:A 2:B)
        end

        local A B C in
            C = tree(1:A 2:B)
            C = T
            local D in
                local E F in
                    E = 1
                    F = 1
                    {Eq E F D}
                end
            end
            if D then
                local E in
                    local F in

```

```

                                local G H in
                                    G = 5
                                    H = 2
                                    {IntMinus G H F}
                                    skip Browse F
                                end
                            end
                        end
                    else
                        skip Basic
                    end
                end
            end
        end
    end
end
*/
/*
// (4)
local Fun R in
    Fun = proc{$ A B}
    B = A
end

local C in
    C = 4
    {Fun C R}
    skip Basic
end

skip Browse R
end
*/

//5)
local A B in
    skip Basic
    local C D E in
        C = 4
        D = B
        local L G in
            L = B
            G = B
            E = pair(1:L 2:G)
            A = rdc(1:C 2:D 3:E)

```

```

local H I in
  H = 5
  local J K in
    J = 3
    K = 4
    {IntMinus J K I}
    {IntPlus H I B}
    skip Browse A
    skip Browse B
    skip Store
  end
end
end
end

```

Part 2:

- A. The way we can derive the value of the output lists from the information in the store is by understanding the syntax " ((value), " as the store location and whatever proceeds it as what is stored there. This can include other store locations as well to essentially point to a pointer .
- B. Same as A
- C.