AUTOMATICALLY GENERATED LATEX

January 7, 2019

0.1 INPUT CODE

```
selectionSort(A[N])
{
   for (i=0; i < N; i=i+1)
   {
      m = i;
      for (j=i+1; j < N; j=j+1)
      {
         if (A[j] < A[m])
         {
            m = j;
         }
      }
      if (i != m)
      {
         t = A[i];
         A[i] = A[m];
         A[m] = t;
      }
   }
   return A;
}
```

0.2 CONVERTED LINES

$$selectionSort\left(A[N]\right) = L_2\left(A, N, i, m, j, t\right)$$

$$L_2\left(A, N, i, m, j, t\right) = L_3\left(A, N, i, m, j, t\right)$$

$$L_3\left(A, N, i, m, j, t\right) = F_1\left(A, N, 0, m, j, t\right)$$

$$F_1\left(A, N, i, m, j, t\right) = \Delta_{i<N}\left(L_4\left(A, N, i, m, j, t\right), L_{20}\left(A, N, i, m, j, t\right)\right)$$

$$L_4\left(A, N, i, m, j, t\right) = L_5\left(A, N, i, m, j, t\right)$$

$$L_5\left(A, N, i, m, j, t\right) = L_6\left(A, N, i, i, j, t\right)$$

$$L_6(A,N,i,m,j,t) = F_2(A,N,i,m,i+1,t)$$

$$F_2(A,N,i,m,j,t) = \Delta_{j<N}(L_7(A,N,i,m,j,t), L_{13}(A,N,i,m,j,t))$$

$$L_7(A,N,i,m,j,t) = L_8(A,N,i,m,j,t)$$

$$L_8(A,N,i,m,j,t) = \Delta_{A_j<A_m}(L_9(A,N,i,m,j,t), L_{11}(A,N,i,m,j,t))$$

$$L_9(A,N,i,m,j,t) = L_{10}(A,N,i,m,j,t)$$

$$L_{10}(A,N,i,m,j,t) = L_{11}(A,N,i,j,j,t)$$

$$L_{11}(A,N,i,m,j,t) = L_{12}(A,N,i,m,j,t)$$

$$L_{12}(A,N,i,m,j,t) = F_2(A,N,i,m,j+1,t)$$

$$L_{13}(A,N,i,m,j,t) = \Delta_{i\neq m}(L_{14}(A,N,i,m,j,t), L_{18}(A,N,i,m,j,t))$$

$$L_{14}(A,N,i,m,j,t) = L_{15}(A,N,i,m,j,t)$$

$$L_{15}(A,N,i,m,j,t) = L_{16}(A,N,i,m,j,A_i)$$

$$L_{16}(A,N,i,m,j,t) = L_{17}(|A+\delta_N(i)(A_m-A_i)|,N,i,m,j,t)$$

$$L_{17}(A,N,i,m,j,t) = L_{18}(|A+\delta_N(m)(t-A_m)|,N,i,m,j,t)$$

$$L_{18}(A,N,i,m,j,t) = L_{19}(A,N,i,m,j,t)$$

$$L_{19}(A,N,i,m,j,t) = F_1(A,N,i+1,m,j,t)$$

$$L_{20}(A,N,i,m,j,t) = A$$

$$L_{21}(A,N,i,m,j,t) = \infty$$

0.3 SQUISHED LINES

$$selectionSort(A[N]) = F_1(A,N,0,m,j,t)$$

$$F_1(A,N,i,m,j,t) = \Delta_{i<N}(F_2(A,N,i,i,i+1,t), A)$$

$$F_2(A,N,i,m,j,t) = \Delta_{j<N}\Big(\Delta_{A_j<A_m}(F_2(A,N,i,j,j+1,t), F_2(A,N,i,m,j+1,t)), \Delta_{i\neq m}(F_1(||A+\delta_N(i)(A_m-|$$

0.4 CONVERTED CODE

```
function selectionSort(A[N]) {
    return F1(A,N,0,m,j,t);
}
function F1(A,N,i,m,j,t) {
    return (i < N) ? F2(A,N,i,i,i+1,t) : A;
}
function F2(A,N,i,m,j,t) {
    return (j < N) ? (A_{j} < A_{m}) ? F2(A,N,i,j,j+1,t) : F2(A,N,i
    ,m,j+1,t) : (i != m) ? F1( | |A + \delta_{N}(i)(A_{m} -  |A + \
    delta_{N}(i)(A_{m} - A_{i})| _{i})|  + \delta_{N}(m)(A_{i} - A_
    {m})| ,N,i+1,m,j,A_{i}) : F1(A,N,i+1,m,j,t);
}
```