```
int sort (int x[ ], int n)
{ int i, j, save, iml;
  /* This function sorts array x in ascending order */
   if (n < 2) return 1;
   for (i=2 ; i<= n ; i++)
     { iml = i-1;
       for (j= 1;j<= iml ;j++)
           if (x[i] < x[j])
             { save = x[i];
               x[i] = x[j];
               x[j ] = save;
             }
       }
   return 0;
}
```

Operators	Occurrences	Operands	Occurrences
int	4	sort	1
( )	5	x	7
[ ]	7	n	3
,	4	i	8
;	11	j	7
if	2	save	3
<	2	iml	3
return	2	1	3
for	2	2	2
=	6	0	1
<=	2		
++	2	$n_2 = 10$	$N_2 = 38$
{ }	3		

$n_1 = 14 \quad N_1 = 53$

$\Rightarrow n_1 = 14 \quad n_2 = 10$

$N_1 = 53 \quad N_2 = 38$

a) Halstead Program length

$N = N_1 + N_2$

$= 53 + 38$

$= 91$

b) Halstead Vocabulary

$n = n_1 + n_2$

$= 14 + 10$

$= 24$

c) Program Volume

$V = \text{length} * (\log_2 \text{vocabulary})$

$= 91 * (\log_2 24)$

$= 91 * 4.585$

$= 417.235$

d) Potential minimum Volume

$V^* = (2 + n_2^*) * \log_2 (2 + n_2^*)$ $\quad n_2^* = 3$

$= (2 + 3) * \log_2 (2 + 3)$

$= 5 * \log_2 (5)$

$= 5 * 2.322$

$= 11.61$

e) Program level

$L = V^*/V$

$= 11.61 / 417.235$

$= 0.027$