

Name	Associated information
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$\leftarrow n \rightarrow$ $\leftarrow m \rightarrow$

Fixed-length entry

Here 'n' units of storage are always allocated to store the name irrespective of its actual length and 'm' units are ~~always~~ allocated to store the information associated with it. In this case, we can use an array of fixed length for symbol table.

Advantages of fixed-length entries:

- i) All entries in the table are exactly alike. Therefore, two entries can be interchanged if it is so required.
- ii) The table length can be fixed on the basis of the number of entries which it is expected to hold.
- iii) The position of any entry in the table can be directly calculated from the entry number, 'ex', the address of 'ith' entry can be calculated as $[a + (i-1) \times (n+m)]$ where 'a' is the starting address of the first entry.

Variable-length entry: If a programming language allows a long variable name but the average and maximum variable names are different, then we can design a symbol table entry as a variable length entry.

Length	Name	Associated information
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$\leftarrow l \rightarrow$ $\leftarrow 1 \text{ to } n \rightarrow$ $\leftarrow m \rightarrow$

Variable length entry