## Description

This routine computes the grid points corresponding to the left end of the rows of points defining the basin boundary.

## Calling Sequence

CALL SBYPOS (X,Y,XDEL,YDEL,IP,NBPTS,IY,IXB,IXE,MSEGS,IYP,LFACTR,ISTAT)

| Argument | Input/ Output | Type | Dimension | Description |
| :---: | :---: | :---: | :---: | :---: |
| X | I | $R * 4$ | NBPTS | Array of $X$ coordinate basin boundary points |
| Y | I | $R * 4$ | NBPTS | Array of $Y$ coordinate basin boundary points |
| XDEL | I | $R * 4$ | 1 | Computed absolute difference between current and next $X$ coordinate |
| YDEL | I | $R * 4$ | 1 | Computed absolute difference between current and next $Y$ coordinate |
| IP | I | I * 4 | 1 | Index of the current value in arrays $X$ and $Y$ |
| NBPTS | I | I * 4 | 1 | Number of basin boundary points |
| IY | 0 | I * 4 | MSEGS | Array of rows of grid points within defined basin |
| IXB | 0 | I * 4 | MSEGS | Array of columns of leftmost grid points within defined basin |
| IXE | 0 | I * 4 | MSEGS | Array of columns of rightmost grid points within defined basin |
| MSEGS | I | I * 4 | 1 | Maximum dimension of arrays IY, IXB and IXE |
| IYP | I / O | I * 4 | 1 | Pointer to location in arrays IY, IXB and IXE for next grid point to be defined |



