Sample method 1

|  |  |
| --- | --- |
| data | Value returned |
| {2,6,-4,8,3} | 8 |
| {22,30,50,43} | 50 |

Method trace

{2, 6,-4, 8, 3}

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| line | result | i | Data[i] | output |
| 2 | -1000 |  |  |  |
| 4 | -1000 | 0 |  |  |
| 5 | -1000 | 0 | 2 |  |
| 6 | 2 | 0 | 2 |  |
| 4 | 2 | 1 | 6 |  |
| 5 | 2 | 1 | 6 |  |
| 6 | 6 | 1 | 6 |  |
| 4 | 6 | 2 | -4 |  |
| 5 | 6 | 2 | -4 |  |
| 4 | 6 | 3 | 8 |  |
| 5 | 6 | 3 | 8 |  |
| 6 | 8 | 3 | 8 |  |
| 4 | 8 | 4 | 3 |  |
| 5 | 8 | 4 | 3 |  |
| 10 | 8 | 5 | 3 | 8 |

{22, 40, 50, 43}

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Line | result | i | Data[i] | output |
| 2 | -1000 |  |  |  |
| 4 | -1000 | 0 |  |  |
| 5 | -1000 | 0 | 22 |  |
| 6 | 22 | 0 | 22 |  |
| 4 | 22 | 1 | 22 |  |
| 5 | 22 | 1 | 30 |  |
| 6 | 30 | 1 | 30 |  |
| 4 | 30 | 2 | 30 |  |
| 5 | 30 | 2 | 50 |  |
| 6 | 50 | 2 | 50 |  |
| 4 | 50 | 3 | 50 |  |
| 5 | 50 | 3 | 43 |  |
| 4 | 50 | 4 | 43 |  |
| 10 | 50 | 4 | 43 | 50 |

Method name: biggestNumber()

Code sample 2

|  |  |  |
| --- | --- | --- |
| data | val | value returned |
| {2, 6, -3, 7, 3} | 7 | True |
| {-1, 8, 2, -4, 9} | 5 | False |

{2, 6, -3, 7, 3}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| line | i | Data[i] | result | Val | output |
| 2 |  |  | false | 7 |  |
| 3 | 0 |  | false | 7 |  |
| 6 | 0 | 2 | false | 7 |  |
| 9 | 1 | 2 | false | 7 |  |
| 6 | 1 | 6 | false | 7 |  |
| 9 | 2 | 6 | false | 7 |  |
| 6 | 2 | -3 | false | 7 |  |
| 9 | 3 | -3 | false | 7 |  |
| 6 | 3 | 7 | false | 7 |  |
| 7 | 3 | 7 | true | 7 |  |
| 12 | 3 | 7 | true | 7 | true |

{-1, 8, 2, -4, 9}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| line | i | Data[i] | result | Val | output |
| 2 |  |  | false | 5 |  |
| 3 | 0 |  | false | 5 |  |
| 6 | 0 | -1 | false | 5 |  |
| 9 | 1 | -1 | false | 5 |  |
| 6 | 1 | 8 | false | 5 |  |
| 9 | 2 | 8 | false | 5 |  |
| 6 | 2 | 2 | false | 5 |  |
| 9 | 3 | 2 | false | 5 |  |
| 6 | 3 | -4 | false | 5 |  |
| 9 | 4 | -4 | false | 5 |  |
| 6 | 4 | 9 | false | 5 |  |
| 12 | 4 | 9 | false | 5 | false |

Method name: isInSet()

Code sample 3

|  |  |
| --- | --- |
| String[] names | {“Allen”, ”Barbara”, ”Carin”} |

|  |  |  |  |
| --- | --- | --- | --- |
| Line | i | names[i] | Output |
| 3 |  |  | Array of 3 values |
| 4 | 0 |  |  |
| 5 | 0 | “Allen” | Allen |
| 4 | 1 |  |  |
| 5 | 1 | “Barbara” | Barbara |
| 4 | 2 |  |  |
| 5 | 2 | “Carin” | Carin |

Code sample 4

|  |  |
| --- | --- |
| values | {1, 3, 5} |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| line | i | Values[0] | Values[1] | Values[2] | temp | output |
| 1 |  | 1 | 3 | 5 |  |  |
| 4 |  | 1 | 3 | 5 | 1 |  |
| 5 | 1 | 1 | 3 | 5 | 1 |  |
| 6 | 1 | 1 | 3 | 5 | 1 |  |
| 5 | 2 | 1 | 3 | 5 | 1 |  |
| 8 | 1 | 1 | 3 | 5 | 1 | 1 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 0 | 1 | 2 |
| data | 1 | 3 | 5 |