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| SortedStack |

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| Attributes: |

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| - stack: Stack<Integer> |

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| Methods: |

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| + insertSorted(stack: Stack<Integer>, data: int): void |

| | - Inserts an integer into the stack and sorts the stack |

| | - Throws IllegalArgumentException for invalid data |

| + printStack(stack: Stack<Integer>): void |

| | - Prints all elements of the stack |

| + main(args: String[]): void |

| | - Reads input from the user, inserts, and prints the stack |

| | - Handles input validation |

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| Stack |

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| Attributes: |

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| - elements: ArrayList<E> |

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| Methods: |

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| + push(item: E): void |

| + pop(): E |

| + peek(): E |

| + isEmpty(): boolean |

| + size(): int |

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