# ArrayStack 2

Looking at the Stack below; Follow the code executions and write in the current state of the Array at Each state.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **State** | | **Index** | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **A** | ArrayStack stack = new ArrayStack(10) | **A** |  |  |  |  |  |  |  |  |  |  |
|  | Push(93) |  | isEmpty() | | | True | | isFull() | | | False | |
|  | Push(5) |  |  |  |  |  |  |  |  |  |  |  |
|  | Pop() | **B** | 93 | 17 |  |  |  |  |  |  |  |  |
| **B** | Push(17) |  | isEmpty() | | | False | | isFull() | | | False | |
|  | Push(33) |  |  |  |  |  |  |  |  |  |  |  |
| **C** | Push(87) | **C** | 93 | 17 | 33 | 87 |  |  |  |  |  |  |
|  | Pop() |  | isEmpty() | | | False | | isFull() | | | False | |
| **D** | Push(46) |  |  |  |  |  |  |  |  |  |  |  |
|  | Pop() | **D** | 93 | 17 | 33 | 46 |  |  |  |  |  |  |
|  | Pop() |  | isEmpty() | | | False | | isFull() | | | False | |
|  | Pop() |  |  |  |  |  |  |  |  |  |  |  |
| **E** | Pop() | **E** |  |  |  |  |  |  |  |  |  |  |
|  | Push(52) |  | isEmpty() | | | True | | isFull() | | | False | |
|  | Push(28) |  |  |  |  |  |  |  |  |  |  |  |
| **F** | Push(4) | **F** | 52 | 28 | 4 |  |  |  |  |  |  |  |
|  | Push(77) |  | isEmpty() | | | False | | isFull() | | | False | |
|  | Push(51) |  |  |  |  |  |  |  |  |  |  |  |
|  | Push(81) | **G** | 52 | 28 | 4 | 77 | 51 | 81 | 13 |  |  |  |
| **G** | Push(13) |  | isEmpty() | | | False | | isFull() | | | False | |
|  | Push(49) |  |  |  |  |  |  |  |  |  |  |  |
|  | Push(24) | **H** | 52 | 28 | 4 | 77 | 51 | 81 | 13 | 49 | 24 | 15 |
| **H** | Push(15) |  | isEmpty() | | | False | | isFull() | | | True | |
| **I** | Pop() |  |  |  |  |  |  |  |  |  |  |  |
|  | Pop() | **I** | 52 | 28 | 4 | 77 | 51 | 81 | 13 | 49 | 24 |  |
|  | Pop() |  | isEmpty() | | |  | | isFull() | | |  | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| **J** | Final State | **J** | 52 | 28 | 4 | 77 | 51 | 81 | 13 |  |  |  |