***HW 4 – Program Trace***

### Main function

|  |  |  |  |
| --- | --- | --- | --- |
| i loop counter | Numbers | makeWord return value | getNum return value |
| 0 | 19,17,8,2,10,24,24 | trick | -1 |
| 1\* |  |  |  |
| 2 | 19,17,4,0,19,24,24 | treat | 199 |

\*Loop 1 never ran because getNum function added 1 to i before returning a value

### fillArray function

|  |  |
| --- | --- |
| set | Numbers |
| 0 | 19,17,8,2,10,24,24 |
| 2 | 19,17,4,0,19,24,24 |

### getNum function

|  |  |  |
| --- | --- | --- |
| Main i loop counter | numbers | i |
| 0 | 0 | -1 |
| 1\* |  |  |
| 2 | 2 | 199 |

\*Loop 1 never ran because getNum function’s number++ added 1 to i before returning a value

### makeWord function

|  |  |  |  |
| --- | --- | --- | --- |
| Main i loop counter | i loop counter | Num[i] | Return word |
| 0 | 0 | 19 | t |
|  | 1 | 17 | r |
|  | 2 | 8 | i |
|  | 3 | 2 | c |
|  | 4 | 10 | k |
|  |  | **Returned Output:** | trick |
| 1\* |  |  |  |
| 2 | 0 | 19 | t |
|  | 1 | 17 | r |
|  | 2 | 4 | e |
|  | 3 | 0 | a |
|  | 4 | 19 | t |
|  |  | **Returned Output:** | treat |

\*Loop 1 never ran because getNum function added 1 to i in main function before returning a value

Final output: trick or treat!