**T-Diagrams**

Code Snippet 1

|  |  |
| --- | --- |
| Var | value |
|  |  |

Console:  
Hello  
Dojo

Code Snippet 2

|  |  |
| --- | --- |
| Var | Value |
| result | hello() |
| return | 15 |

Console:  
hello

Result is 15

Code Snippet 3

|  |  |
| --- | --- |
| Var | Value |
| Result | numPlus(3) |
| Num | 3 |
| Return | 18 |

Console:   
num is 3  
result is 18

Code Snippet 4

|  |  |
| --- | --- |
| Var | value |
| Num | 15 |
| Result | logAndReturn(10) |
| Num2 | 10 |
| Return | 10 |

Console:  
15  
10  
10  
15

Code Snippet 5

|  |  |
| --- | --- |
| Var | Value |
| num | 15 |
| result | timesTwo(10) |
| Num2 | 10 |
| Return | 20 |

Console:  
15  
10

Code Snippet 6

|  |  |
| --- | --- |
| Var | Value |
| Result | timesTwoAgain(3) + timesTwoAgain(5) |
| Num | 3 |
| Y | 6 |
| Return | 6 |
|  | 6+timesTwoAgain(5) |
| Num | 5 |
| Y | 10 |
| Return | 10 |
|  | 6+10 |

Console

Num is 3  
num is 5   
result is 16

Code Snippet 7

|  |  |
| --- | --- |
| Var | value |
| Console.log() | sumNums(2,3) |
| Num1 | 2 |
| Num2 | 3 |
| Return | 5 |
|  | 5 |
| Console.log() | sumNums(3,5) |
| Num1 | 3 |
| Num2 | 5 |
| Return | 8 |
|  | 8 |
|  |  |
|  |  |

Console

5

8

Code Snippet 8

|  |  |
| --- | --- |
| Var | Value |
| Console.log() | printSumNums(2,3) |
| Num1 | 2 |
| Num2 | 3 |
| Return | 5 |
|  |  |
| Console.log() | printSumNums(3,5) |
| Num1 | 3 |
| Num2 | 5 |
| Return | 8 |
|  |  |

Console

2

5

3

8

Code Snippet 9

|  |  |
| --- | --- |
| Var | Value |
| Result | sumNums(2,3) + sumNums(3,5) |
| Num1 | 2 |
| Num2 | 3 |
| Sum | 5 |
| Return | 5 |
|  |  |
|  | 5+sumNums(3,5) |
| Num1 | 3 |
| Num2 | 5 |
| Sum | 8 |
| Return | 8 |
|  |  |
|  | 5+8=13 |

Console

Sum is 5

Sum is 8

Result is 13

Code Snippet 10

|  |  |
| --- | --- |
| Var | Value |
| Result | sumNums(2,3) + sumNums(3,sumSums(2,1)) + sumNums(sumNums(2,1), sumNums(2,3)) |
| sumNums(2,3) | 5 |
| Num1 | 2 |
| Num2 | 3 |
| Sum | 5 |
| Return | 5 |
|  |  |
| sumNums(3,sumNums(2,1)) |  |
| sumNums(2,1) | 3 |
| Num1 | 2 |
| Num2 | 1 |
| Sum | 3 |
| Return | 3 |
| sumNums(2,1) | 3 |
| sumNums(3,3) | 6 |
|  |  |
| sumNums(2,1) |  |
| Num1 | 2 |
| Num2 | 1 |
| Sum | 3 |
| Return | 3 |
|  |  |
| sumNumbs(2,3) | 5 |
|  |  |
| Num1 | 3 |
| Num2 | 5 |
| Sum | 8 |
| Return | 8 |

Console

Sum is 5

Sum is 3

Sum is 6

Sum is 3

Sum is 5

Sum is 8

Result is 19