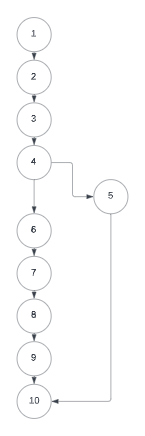
**Unit Test**



|  |  |
| --- | --- |
| Code | Node |
| exports.generate\_solution = (req, res) => { | 1 |
| var born\_on\_year1 = req.query.yearofdeath1 - req.query.ageofdeath1; | 2 |
| var born\_on\_year2 = req.query.yearofdeath2 - req.query.ageofdeath2; | 3 |
| if (req.query.ageofdeath1 < 0 || req.query.ageofdeath2 < 0 || req.query.yearofdeath1 < 0 || req.query.yearofdeath2 < 0 || born\_on\_year1 <= 0 || born\_on\_year2 <= 0) { | 4 |
| res.status(400).send({ message: "-1" }); return; } | 5 |
| var num\_killed\_1 = fibonaci\_algorithm.get\_fibonaci\_sequence(born\_on\_year1); | 6 |
| var num\_killed\_2 = fibonaci\_algorithm.get\_fibonaci\_sequence(born\_on\_year2); | 7 |
| var average = (num\_killed\_1 + num\_killed\_2)/2; | 8 |
| res.send( 'Input: <br/> Person A: Age of death = ' + req.query.ageofdeath1 + ', Year of Death = ' + req.query.yearofdeath1 + '<br/> Person B: Age of death = ' + req.query.ageofdeath2 + ', Year of Death = ' + req.query.yearofdeath2 + '<br/> Answer:' + '<br/> Person A born on Year = ' + req.query.yearofdeath1 + ' - ' + req.query.ageofdeath1 + ' = ' + born\_on\_year1 + ', number of people killed on year ' + born\_on\_year1 + ' is ' + num\_killed\_1 + '<br/>' + 'Person B born on Year = ' + req.query.yearofdeath2 + ' - ' + req.query.ageofdeath2 + ' = ' + born\_on\_year2 + ', number of people killed on year ' + born\_on\_year2 + ' is ' + num\_killed\_2 + '<br/> So the average is ( ' + num\_killed\_1 + ' + ' + num\_killed\_2 + ' )/2 = ' + average ); | 9 |
| }; | 10 |

Cyclomatic complexity

V(G) = E – N + 2

=10 – 10 + 2

= 2

V(G) = P + 1

= 1 + 1

= 2

V(G) = R = 2

Independent Route :

1. 1-2-3-4-5-10
2. 1-2-3-4-6-7-8-9-10

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Route | Input Data | Expected Result | Result | Status |
| 1 | ageofdeath1 = -1; ageofdeath2,yearofdeath1,yearofdeath2 = 1 | Return -1 | Return -1 | valid |
| 1 | ageofdeath2 = -1; ageofdeath1,yearofdeath1,yearofdeath2 = 1 | Return -1 | Return -1 | Valid |
| 1 | yearofdeath1 = -1; ageofdeath1,ageofdeath2,yearofdeath2 = 1 | Return -1 | Return -1 | Valid |
| 1 | yearofdeath2 = -1; ageofdeath1,ageofdeath2,yearofdeath1 = 1 | Return -1 | Return -1 | Valid |
| 1 | Yearofdeath1 < ageofdeath1; Yearofdeath2 > ageofdeath2; | Return -1 | Return -1 | Valid |
| 1 | Yearofdeath1 > ageofdeath1; Yearofdeath2 < ageofdeath2; | Return -1 | Return -1 | Valid |
| 2 | Yearofdeath1 > ageofdeath1; Yearofdeath2 > ageofdeath2; | Show average value | Average value showed | valid |