Типы данных:

|  |  |
| --- | --- |
| Тип | Размер(в байтах) |
| int | 4 |
| double | 8 |
| char | 1 |
| bool | 1 |
| string размера n | n |
| ifstream | 520 |
| ofstream | 512 |

Типы данных программы:

(длина имени языка ограничена 30, поэтому при подсчете везде будем считать что длина 30)

|  |  |
| --- | --- |
| class language | 42 |
| double popularity | 8[0] |
| int creation\_year | 4[8] |
| string name | 30[12] |

|  |  |
| --- | --- |
| class functional : language | 47 |
| typing typing\_type | 4[0] |
| bool lazy\_computation | 1[4] |
| double popularity | 8[5] |
| int creation\_year | 4[13] |
| string name | 30[17] |

|  |  |
| --- | --- |
| class procedural : language | 43 |
| bool has\_adt | 1[0] |
| double popularity | 8[1] |
| int creation\_year | 4[9] |
| string name | 30[13] |

|  |  |
| --- | --- |
| class object\_oriented : language | 46 |
| inheritance inheritance\_type | 4[0] |
| double popularity | 8[4] |
| int creation\_year | 4[12] |
| string name | 30[16] |

|  |  |
| --- | --- |
| class container | 80004 |
| int le | 4[0] |
| language \*storage[10000] | 80000[4] |

|  |  |
| --- | --- |
| enum functional::typing | 4 |
| int DYNAMIC | 4[0] |
| int STRICT | 4[0] |

|  |  |
| --- | --- |
| enum object\_oriented::inheritance | 4 |
| int SINGLE | 4[0] |
| int MULTIPLE | 4[0] |
| int INTERFACE | 4[0] |

Глобальные переменные

|  |  |
| --- | --- |
| int MAX\_NAME\_SIZE | 4[0] |
| int MAX\_CONTAINER\_SIZE | 4[4] |

Память программы:

|  |  |
| --- | --- |
| int main | 81052 |
| int argc | 4[0] |
| char\* argv[] | 8[4] |
| container c | 80004[12] |
| ifstream ifst | 520[80016] |
| int size | 4[80536] |
| ofstream ofst | 512[80540] |

|  |  |
| --- | --- |
| void ShellSort(container &c) | 80024 |
| container &c | 80004[0] |
| int d | 4[80004] |
| int i | 4[80008] |
| int j | 4[80012] |
| language \*tmp | 8[80016] |

|  |  |
| --- | --- |
| void InRnd() | 8 |
| language \*lang | 8[0] |

Стек вызовов

|  |
| --- |
| int main(int argc, char \*argv[]) |
| (runTests | errMessage1) -> ~~main~~ |
| Init |
| ~~Init~~ |
| In | InRnd | (errMessage2 -> ~~main)~~ |
| Out |
| ~~Out~~ |
| ShellSort |
| ~~ShellSort~~ |
| Out |
| ~~Out~~ |
| Clear |
| ~~Clear~~ |
| ~~main~~ |

|  |
| --- |
| In(containter &c, FILE \*file) |
| In() -> (In(procedural &lang) | In(functional &lang) | In(object-oriented &lang)) -> ~~In(…)~~ |
| ~~In~~ |

|  |
| --- |
| InRnd(containter &c) |
| InRnd() -> (InRnd(procedural &lang) | InRnd(functional &lang) | InRnd(object-oriented &lang)) -> ~~InRnd(…)~~ |
| ~~InRnd~~ |

|  |
| --- |
| Out(containter &c) |
| Out() -> (Out(procedural &lang) | Out(functional &lang) | Out(object-oriented &lang)) -> ~~Out(…)~~ |
| ~~Out~~ |