Структурная схема изучаемой архитектуры ВС с размещенной на ней разработанной программы.

Таблица типов.

Тип Память в байтах [сдвиг]

|  |  |  |
| --- | --- | --- |
| int  double  char  short | 4 [0]  8 [4]  1 [12]  2 [13] | |
| **struct container** | | **40008** | |
| enum max\_len  int len  text cont[max\_len] | | 4 [0]  4 [4]  40000 [8] | |
| **struct text** | **28** | | | |
| enum key  key k  union  text\_swap\_elements swapElements  text\_cyclic\_shift cyclicShift  text\_change\_with\_digits changeWithDigits  } | 4 [0]  4 [4]  20 [8]  20 [28]  20 [28] | | | |
| **struct text\_change\_with\_digits** | **20** | | | |
| int length  char \*open\_text  int \*encrypted\_text | 4 [0]  8 [4]  8 [12] | | | |
| **struct text\_swap\_elements** | **20** | | | |
| int length  char \*open\_tex  char \*encrypted\_text | 4 [0]  8 [4]  8 [12] | | | |
| **struct text\_cyclic\_shift** | **20** | | | |
| int length  char \*open\_tex  char \*encrypted\_text | 4 [0]  8 [4]  8 [12] | | | |

Память программы.

|  |  |
| --- | --- |
| **main()** |  |
| int argc  int\* argv[]  container c  ifstream ifst  int size  ofstream ofst1  ofstream ofst2 | 4 [0]  8 [4]  40000 [12]  8 [40012]  4 [40020]  8 [40024]  8 [40032] |
| **BubbleSort()** |  |
| container &c  int right  text\* temp  int k  int i | 40000 [0]  4 [40000]  8 [40004]  4 [40012]  4 [40016] |
| **Init()** |  |
| container &c | 40000 [0] |
| **In()** |  |
| container &c  ifstream &ifst | 40000 [0]  8 [40008] |
| **InRand()** |  |
| container &c  int size | 40000 [0]  4 [40004] |
| **Out()** |  |
| container &c  ofstream &ofst  int i | 40000 [0]  8 [40000]  4 [40008] |

Стек вызовов (сверху вниз).

main

errorMessage1 (поведение main) | errorMessage2 (поведение main)

Init

Init done

In | InRand | errorMessage3 (поведение цикла)

In done | InRand done

Out

Out done

BubbleSort

BubbleSort done

Out

Out done

Clear

Clear done

main done