­Memory Created

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process Created 0

Writing complete

Process Created 1

Writing complete

Process Created 2

Writing complete

Before removing process 1 and 0

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 0 Process Size : 6 Bottom : 0 Top : 5

Process ID : 1 Process Size : 9 Bottom : 6 Top : 14

Process ID : 2 Process Size : 2 Bottom : 15 Top : 16

After removing processes

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 3

Writing complete

Process Created 4

Writing complete

Process Created 5

Writing complete

Before removing process 3 and 4

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 3 Process Size : 5 Bottom : 0 Top : 4

Process ID : 4 Process Size : 8 Bottom : 5 Top : 12

Process ID : 5 Process Size : 1 Bottom : 13 Top : 13

After removing processes

0 0 0 0 0 0 0 0 0 0

0 0 0 1 0 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 6

Writing complete

Process Created 7

Writing complete

Process Created 8

Writing complete

Before removing process 6 and 8

1 1 1 1 1 1 1 1 1 1

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 6 Process Size : 7 Bottom : 0 Top : 6

Process ID : 7 Process Size : 10 Bottom : 17 Top : 26

Process ID : 8 Process Size : 3 Bottom : 7 Top : 9

After removing processes

0 0 0 0 0 0 0 0 0 0

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 9

Writing complete

Process Created 10

Writing complete

Process Created 11

Writing complete

Before removing process 9 and 11

1 1 1 1 1 1 1 1 1 1

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 9 Process Size : 10 Bottom : 0 Top : 9

Process ID : 10 Process Size : 4 Bottom : 27 Top : 30

Process ID : 11 Process Size : 7 Bottom : 31 Top : 37

After removing processes

0 0 0 0 0 0 0 0 0 0

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 12

Writing complete

Process Created 13

Writing complete

Process Created 14

Writing complete

Before removing process 14 and 13

1 1 1 1 1 1 1 0 0 0

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 12 Process Size : 5 Bottom : 0 Top : 4

Process ID : 13 Process Size : 9 Bottom : 31 Top : 39

Process ID : 14 Process Size : 2 Bottom : 5 Top : 6

After removing processes

1 1 1 1 1 0 0 0 0 0

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 15

Writing complete

Process Created 16

Writing complete

Process Created 17

Writing complete

Before removing process 16 and 15

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 15 Process Size : 2 Bottom : 5 Top : 6

Process ID : 16 Process Size : 5 Bottom : 7 Top : 11

Process ID : 17 Process Size : 8 Bottom : 31 Top : 38

After removing processes

1 1 1 1 1 0 0 0 0 0

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 18

Writing complete

Process Created 19

Writing complete

Process Created 20

Writing complete

Before removing process 19 and 20

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 18 Process Size : 5 Bottom : 5 Top : 9

Process ID : 19 Process Size : 8 Bottom : 39 Top : 46

Process ID : 20 Process Size : 2 Bottom : 10 Top : 11

After removing processes

1 1 1 1 1 1 1 1 1 1

0 0 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 21

Writing complete

Process Created 22

Writing complete

Process Created 23

Writing complete

Before removing process 21 and 23

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 21 Process Size : 8 Bottom : 39 Top : 46

Process ID : 22 Process Size : 2 Bottom : 10 Top : 11

Process ID : 23 Process Size : 5 Bottom : 47 Top : 51

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 24

Writing complete

Process Created 25

Writing complete

Process Created 26

Writing complete

Before removing process 24 and 26

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 24 Process Size : 2 Bottom : 39 Top : 40

Process ID : 25 Process Size : 5 Bottom : 41 Top : 45

Process ID : 26 Process Size : 8 Bottom : 46 Top : 53

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 27

Writing complete

Process Created 28

Writing complete

Process Created 29

Writing complete

Before removing process 27 and 29

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 27 Process Size : 5 Bottom : 46 Top : 50

Process ID : 28 Process Size : 8 Bottom : 51 Top : 58

Process ID : 29 Process Size : 1 Bottom : 12 Top : 12

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 0 0 0 0

0 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 30

Writing complete

Process Created 31

Writing complete

Process Created 32

Writing complete

Before removing process 30 and 31

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 30 Process Size : 8 Bottom : 59 Top : 66

Process ID : 31 Process Size : 1 Bottom : 12 Top : 12

Process ID : 32 Process Size : 5 Bottom : 46 Top : 50

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 33

Writing complete

Process Created 34

Writing complete

Process Created 35

Writing complete

Before removing process 33 and 34

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 33 Process Size : 8 Bottom : 59 Top : 66

Process ID : 34 Process Size : 1 Bottom : 12 Top : 12

Process ID : 35 Process Size : 5 Bottom : 67 Top : 71

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 0 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 1 1 1

1 1 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 36

Writing complete

Process Created 37

Writing complete

Process Created 38

Writing complete

Before removing process 38 and 37

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 1 1 1 1 1 1 1 1

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 36 Process Size : 1 Bottom : 12 Top : 12

Process ID : 37 Process Size : 5 Bottom : 59 Top : 63

Process ID : 38 Process Size : 8 Bottom : 72 Top : 79

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 0 0 0 0 0 0 1 1 1

1 1 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 39

Writing complete

Process Created 40

Writing complete

Process Created 41

Writing complete

Before removing process 41 and 40

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 1 1 1 1 1 1 1 1

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 39 Process Size : 5 Bottom : 59 Top : 63

Process ID : 40 Process Size : 8 Bottom : 72 Top : 79

Process ID : 41 Process Size : 1 Bottom : 14 Top : 14

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 42

Writing complete

Process Created 43

Writing complete

Process Created 44

Writing complete

Before removing process 43 and 42

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Process ID : 42 Process Size : 8 Bottom : 72 Top : 79

Process ID : 43 Process Size : 1 Bottom : 14 Top : 14

Process ID : 44 Process Size : 4 Bottom : 80 Top : 83

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 0 0 0 0 0 0 0 0

1 1 1 1 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 45

Writing complete

Process Created 46

Writing complete

Process Created 47

Writing complete

Before removing process 45 and 46

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 1 1 1 1 0 0 0 0

1 1 1 1 1 1 1 1 1 1

1 0 0 0 0 0 0 0 0 0

Process ID : 45 Process Size : 1 Bottom : 14 Top : 14

Process ID : 46 Process Size : 4 Bottom : 72 Top : 75

Process ID : 47 Process Size : 7 Bottom : 84 Top : 90

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 0 0 0 0 0 0 0 0

1 1 1 1 1 1 1 1 1 1

1 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 48

Writing complete

Process Created 49

Writing complete

Process Created 50

Writing complete

Before removing process 50 and 49

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 1 1 1 1 1 1 1 0

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 0 0 0 0 0

Process ID : 48 Process Size : 7 Bottom : 72 Top : 78

Process ID : 49 Process Size : 1 Bottom : 14 Top : 14

Process ID : 50 Process Size : 4 Bottom : 91 Top : 94

After removing processes

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 1 1 1 1 1 1 1 0

1 1 1 1 1 1 1 1 1 1

1 0 0 0 0 0 0 0 0 0

Continue? 0

Process Created 51

Writing complete

Process Created 52

================================CANNOT WRITE 53 ===============================

Before removing process 52 and 51

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 0

0 1 1 1 1 1 1 1 1 1

1 1 1 1 1 1 1 1 1 1

1 1 1 1 0 0 0 1 1 1

1 1 1 1 1 1 1 1 1 0

1 1 1 1 1 1 1 1 1 1

1 1 1 1 1 0 0 0 0 0