

“-----A-----”

```
| a1 a2 s1 s2 s3 oddSum|
oddSum := 0.                                "Initialize oddSum to zero"
a1 := OrderedCollection new: 100.           "Part 1: declare a1 and a2 as ordered collections of size 100"
a2 := OrderedCollection new: 100.
s1 := SortedCollection new: 100.           "Part 2: declare s1, s2, s3 as sorted collections of size 100"
s2 := SortedCollection new: 100.
s3 := SortedCollection new: 100.
```

"Part 3: Initialize a1 to the values indicated in the assignment"

```
a1 := #(8 1 2 3 4 5 77 99 33 10 11 22 33 44 55 66 7 2 3 4 7 8 0).
```

"Part 4: take the last ten indexes of a1, and check to see if they are odd. If so, add their value to oddSum and put them in OrderedCollection a2"

```
a1 size - 9 to: a1 size do: [:j| ((a1 at: j) odd) ifTrue:[a2 add: (a1 at: j). oddSum := oddSum + (a1 at: j)]].
```

```
s1 addAll: a1.                               "Part 5: Take all elements and put them in ascending order into s1"
```

```
s2 := s1 reversed.                           "Part 6: Take all elements in a1 and put them in descending order in s2"
```

"Part 7: Sort in ascending order the ith component of s1 with the ith component of s2 and put in s3"

```
1 to: s1 size do: [:i| s3 add: (s2 at: i) *(s1 at: i)].
```

Transcript clear.

Transcript show: a1;cr.

Transcript show: a2;cr.

Transcript show: s1;cr.

Transcript show: s2;cr.

Transcript show: s3;cr.

Transcript show: oddSum;cr.

"-----B-----"

```
|A B C sum N|
```

```
N :=2.
```

```
A := Matrix new: N element: 3.             "Declare Matrices A and B to be of size N X N"
```

```
B := Matrix new: N element: 3.
```

```
sum := 0.                                  "Initialize sum to 0"
```

```
C := B preMultiplyByMatrix: A.             "Part i: Computer the matrix A X B"
```

"Part ii: sum the elements of C, column order, and put them into sum"

```
1 to: C columnCount do: [:i| 1 to: C rowCount do: [:j| sum := sum + (C at:i at:j)]].
```

Transcript clear.

Transcript show: A;cr.

Transcript show: B;cr.

Transcript show: C;cr.

Transcript show: sum;cr.