

<p style="text-align: center;"><b>WRA202 Assignment: Max marks 20</b> <b>17 October 2013</b></p>
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**Due date:** in Charmain's Inbox by no later than Monday 21-Oct 2013 @ 12:00

**Submission format (1 submission required per group):**

1. Email with attachment.
2. Student numbers and names of group members (no more than 4 to a group) in email message.
3. Next to each group member, a percentage value indication of each person's contribution to the submission (%s must add up to 100%).
4. Perfectly working Semester Test Questions 1 & 2 – require a compressed version of the entire solution as an attachment.
5. For every hour or part thereof later than submission deadline, all members of the group lose 5% of their mark.

**Instructions:**

1. Using the test template files circulated, in groups of no more than 4 people (no exceptions permitted – make a plan regarding group size), prepare a solution for the test questions so that each program works PERFECTLY (see expected output over the page).
2. Submit as required above.
3. For your convenience, you may refer to your test submissions copied onto the Courses folder or WRA202 module portal.

(your test usercode is *frioct-36*)

**PLEASE NOTE:** USE THE SinglyLinkedList CLASS TEMPLATE CIRCULATED – the one in your test usercode folder had a bug in it – you will be appropriately compensated for this error in the marks awarded for your test submission.

### Question 1 Expected Output

```
List of allocated memory being populated .....
List of allocated memory populated

List of memory blocks currently allocated: 12
MemID: 35 Size (in kB): 222 InUse: True
MemID: 36 Size (in kB): 78 InUse: True
MemID: 40 Size (in kB): 151 InUse: True
MemID: 42 Size (in kB): 162 InUse: True
MemID: 48 Size (in kB): 203 InUse: True
MemID: 49 Size (in kB): 8 InUse: True
MemID: 52 Size (in kB): 235 InUse: True
MemID: 53 Size (in kB): 246 InUse: True
MemID: 62 Size (in kB): 60 InUse: True
MemID: 81 Size (in kB): 14 InUse: True
MemID: 87 Size (in kB): 234 InUse: True
MemID: 149 Size (in kB): 230 InUse: True

List of memory blocks currently available: 6
MemID: 142 Size (in kB): 253 InUse: False
MemID: 71 Size (in kB): 192 InUse: False
MemID: 13 Size (in kB): 190 InUse: False
MemID: 63 Size (in kB): 150 InUse: False
MemID: 47 Size (in kB): 122 InUse: False
MemID: 153 Size (in kB): 74 InUse: False

ANSWER QUESTION 1 BONUS MARK a) REFERRING TO THE OUTPUT DISPLAYED DIRECTLY ABOVE
Press enter to continue

No appropriate memory block can accommodate 256kB
Memory block 63 can accommodate 150kB
Memory block 63 can accommodate 128kB
Memory block 153 can accommodate 50kB

ANSWER QUESTION 1 BONUS MARK b) REFERRING TO THE OUTPUT DISPLAYED DIRECTLY ABOVE
Press enter to continue

Non-corrupt memory blocks are:
47
63
71
Percentage wastage of memory blocks is 52.7013251783894%

ANSWER QUESTION 1 BONUS MARK c) REFERRING TO THE OUTPUT DISPLAYED DIRECTLY ABOVE
Press enter to continue

Processing terminated ..... press enter to continue
```

### Question 2 Expected Output

```
List of available memory being populated .....
List of available memory populated

No appropriate memory block can accommodate 256kB
Memory block 63 can accommodate 150kB
Memory block 63 can accommodate 128kB
Memory block 62 can accommodate 50kB

ANSWER QUESTION 2 BONUS MARK REFERRING TO THE OUTPUT DISPLAYED DIRECTLY ABOVE
Press enter to continue

Processing terminated ..... press enter to continue
```