# Answers to Questions from TT3.1

Name:

Student ID:

## 1: Assume that age has the value 0. List the actions the computer executes when it runs the following code.

WriteLn('Message 0');

while age < 5 do

begin

WriteLn('Message 1');

age := age + 1;

end;

WriteLn('Message 2');

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| Sequence | Action | Note |
| 1 | Calls the WriteLn procedure with the text ‘Message 0’ |  |
| 2 | Evaluates the expression (condition of while) age < 5 | Condition is true. |
| 3 | Jumps into the while loop |  |
| 4 |  |  |
| 5 |  | Age now 1 |
| 6 | Returns to the top of the while loop |  |
| 7 | Evaluates the expression (condition of while) age < 5 | Condition is true. |
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| 23 | Returns to the top of the while loop |  |
| 24 | Jumps to the end of the while loop |  |
| 22 | Calls the WriteLn procedure with the text ‘Message 2’ |  |

2. Assume that age has the value 8. List the actions the computer executes when it runs the following code.

WriteLn('Message 0');

while age > 5 do

begin

WriteLn('Message 1');

age := age - 2;

end;

WriteLn('Message 2');

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| Sequence | Action | Note |
| 1 | Calls the WriteLn procedure with the text ‘Message 0’ |  |
| 2 | Evaluates the expression (condition of while) age > 5 | Condition is true. |
| 3 | Jumps into the while loop |  |
| 4 |  |  |
| 5 |  | Age now 6 |
| 6 | Returns to the top of the while loop |  |
| 7 | Evaluates the expression (condition of while) age > 5 | Condition is true. |
| 8 | Jumps into the while loop |  |
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| 12 | Jumps to the end of the while loop |  |
| 13 | Calls the WriteLn procedure with the text ‘Message 2’ |  |