LOGICAL THINKING

I. Solving Problems through logical thinking.

Question 1

3 letters
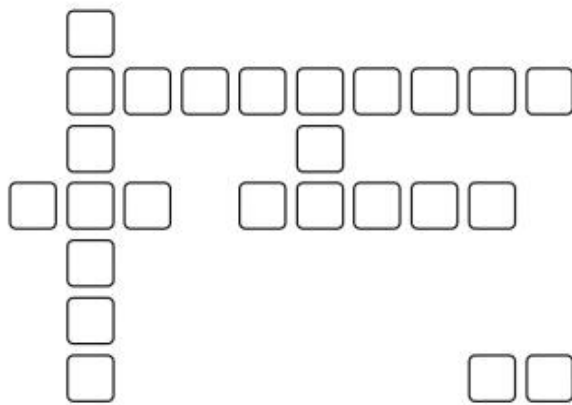ant
bee
bug
fly

4 letters
gnat
moth
slug
wasp
worm

5 letters
aphid
louse
midge
snail

6 letters
beetle
earwig
spider
weevil

8 letters
lacewing
ladybird
nematode

9 letters
butterfly

Question 2

3 letters	4 letters	5 letters	6 letters	7 letters	8 letters	9 letters
bit	byte	debug	output	program	variable	decompose
run		input	repeat			algorithm
			search			selection

NONOGRAMS

II. Solving Problems through nonograms.

Nonograms is a logic puzzle with simple rules and challenging solutions.

The rules are

> ➤ *You have a grid of squares, which must be either filled in black or marked with X.*
> ➤ *Beside each row of the grid are listed the lengths of the runs of black squares on that row.*
> ➤ *Above each column are listed the lengths of the runs of black squares in that column.*
> ➤ *Your aim is to find all black squares.*

Example

(a) 6 × 6 Nonogram

(b) Solved Nonogram

Question 1

Nonogram puzzle 1 — column clues (top, read top-to-bottom):

Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10
2 2	1 1	1	3 2	9	2 4	5	1 5	1 5	1 5

Row clues (left):

Row	Clues
1	1 4 3
2	2 3
3	2
4	1
5	2
6	2 7
7	1 7
8	6
9	1 4
10	4

Question 2

Nonogram puzzle 2 — column clues (top, read top-to-bottom):

Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10
2	2 5	3 3 1	4 4	4	2	2 1	2 1	7	7

Row clues (left):

Row	Clues
1	7
2	9
3	3 2
4	2 2
5	2
6	3 2
7	4 4
8	3 2
9	1 1
10	3

Question 3

Nonogram puzzle (10 × 10 grid).

Column clues (top to bottom):

					1				
				1	1				
		1	2	2	1	2			
	2	1	1	1	1	1	1	2	
5	4	2	1	1	1	1	2	4	5

Row clues (left):

		3	3
	2	4	2
		1	1
1	2	2	1
	1	1	1
	2	2	2
		1	1
	1	2	1
		2	2
			6