University of Ottawa **Student name** …………….………...
School of IT and Engineering **Student no**. …………….………..……..
CSI 2165

Quiz 1

Q1. [2 mark]

Show the variable instantiations (the values of X and Y) if the matching between the term in the first column and the term in the second column succeeds. Use "No" otherwise.

Term1	Term2	Instantiations		
[1	[1, 1]]	[X	Y]	X = 1		Y = [1, 1]
[a, [a]]	[X	X]	X =	No	
f(a, g(Y))	f(X, g([b, c]))	X = a		Y = [b, c]
f(X, g(Y))	f([a], g([b | X]))	X = [a]		Y = [b, a]

Q2. [2 marks]

Read the following program and provide the answer to the query.

Program	`prog1([_],[]).`
	
	`prog1([H|T], [[H1]|T1]):- H1 is H * H, prog1(T,T1).`

Query	`prog1([1, 2, 3], R).`
Answer	`R = [[1],[4]]`