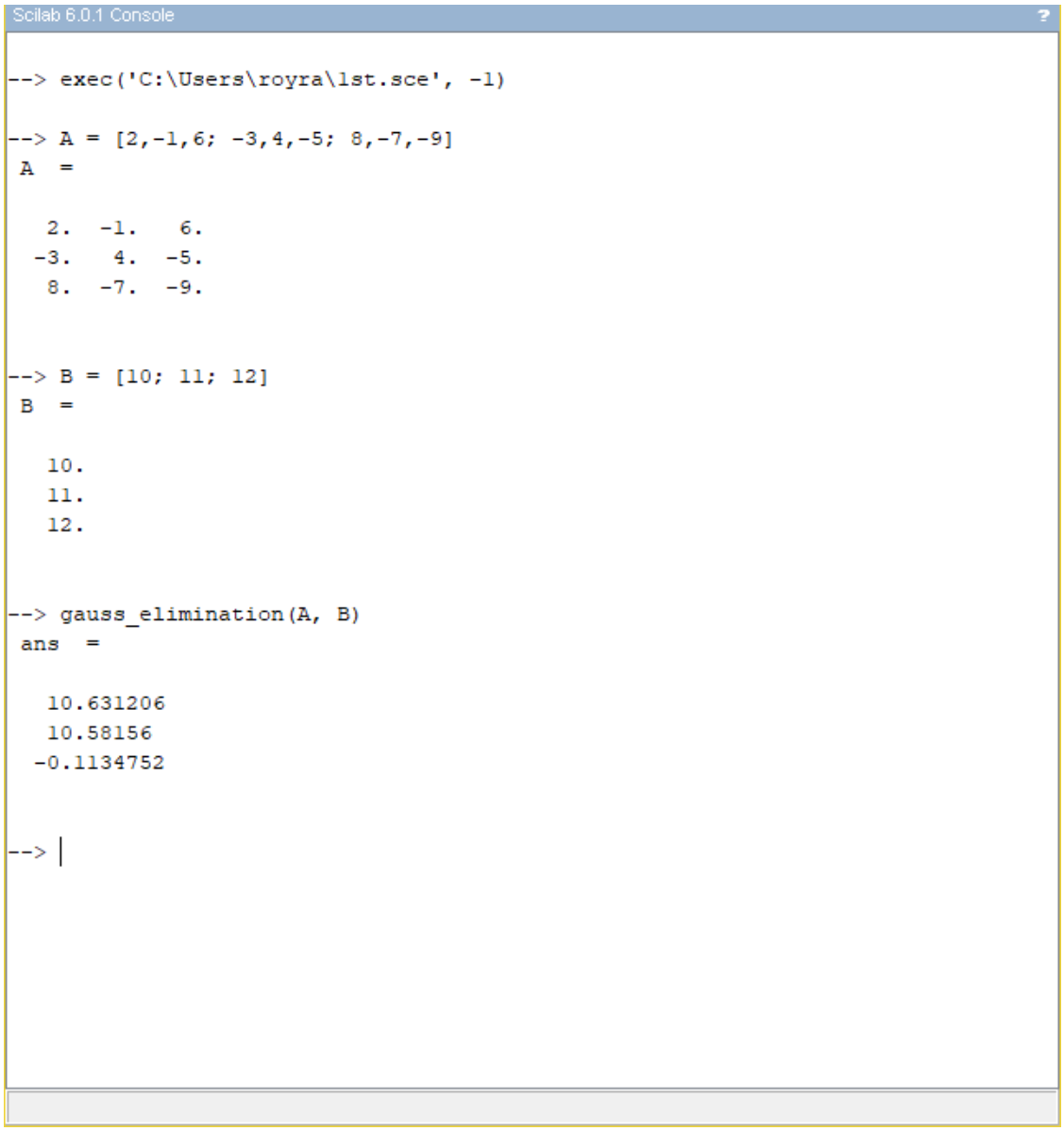
Gauss Elimination using Scilab

Source Code:

```
funcprot(0)
function[x] =gauss_elimination(coefficient, constant)
	[row, col] = size(coefficient)
	[c_row, c_col] = size(constant);
	if row~=col | c_row ~= row | c_col ~= 1 then
		error('-------not possible-------');
		abort;
	else
		a = [coefficient, constant];
	end
	l = 1;
	for i=1 : row
		for j=1 : i-1
			if a(j, j)==0
				i = row + 1;
				j = row + 1;
				l = 0;
				abort;
			else
				p = a(i, j)/a(j, j);
				for k=1 : row+1
					a(i, k) = a(i, k) - (p * a(j, k));
				end
			end
		end
	end
	if l == 0 then
		error('-------not possible for this matrix-------');
		abort;
	else
		x(row) = constant(row)/a(row, row);
		for i = row : -1 : 1
			h = 0;
			for j = i+1 : row
				h = h + a(i, j) * x(j);
			end
			x(i) = (a(i, row+1) - h)/a(i, i);
		end
	end
endfunction
```

Name: Ranajit Roy, **Roll:** 47, **Sec:** A

Output:



Name: Ranajit Roy, **Roll:** 47, **Sec:** A