

**Solution to Exercise 12 (Sec. 3.1) (10/04/2013)****(a)**

```
n=5;
A=zeros(n); x=zeros(1,n);
for i=1:n
    for j=1:n
        A(i,j)=1/(i+j-1);
    end;
end;
x=(1:n)';
b = A*x;
max(abs(gauss_elim(single(A),single(b))'-x))
```

**(b)**

```
n=11;
A=zeros(n); x=zeros(1,n);
for i=1:n
    for j=1:n
        A(i,j)=1/(i+j-1);
    end;
end;
x=(1:n)';
b = A*x;
max(abs(gauss_elim(A,b)'-x))
```