

**Chapitre 6 - TP2****RÉVISIONS – CORRIGÉ**

```
// Exercice 1
function u = suite(n)
    u = 1
    for k = 0:n-1
        u = (7/6)^k - u
    end
endfunction

L = []
for k = 0:20
    L = [L, suite(k)]
end
disp(L)

// la suite n'est pas monotone mais semble tendre vers +infini

n = 0
while suite(n) < 1000
    n = n+1
end
disp(n)

// Exercice 2
n = input('entrez la valeur de n : ')
M = eye(n,n)
for k = 1:n-1
    M(k+2,k+1) = -k
end
disp(M)

// Exercice 3
function S = somme(n)
    S = 0
    for k = 0:n
        S = S + (-1)^k/(k+1)^(k+1)
    end
endfunction

L = []
for k = 0:100
    L = [ L , (-1)^k/(k+1)^(k+1) ]
end
disp(L)

N = [0:100]
L = (-1).^N ./ (N+1).^(N+1)

S = sum(L)
```

```
A = zeros(4,5)
for i = 1 : 4
    for j = 1 : 5
        A(i,j) = (-1)^i/(i+1)^(i+1) + (-1)^j/(j+1)^(j+1)
    end
end
disp(A, 'A=')
```

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// Exercice 4
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```
P = 1
for i = 2:50
    P = P * log(i+1)
end
disp(P)
```

```
P = prod( log( [2:50] + 1 ) )
```