



TP6

RÉVISIONS : IF, FOR, WHILE

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// Exercice 1
for k = 1:10
    disp( floor( 6*rand() + 1) )
end

n=1
while floor( 6*rand() +1) <> 6
    n=n+1
end
disp(n)

// Exercice 2
u = input('Saisir un entier naturel u0:')
n = input('Saisir un entier naturel n:')
for k = 1:n
    if floor(u/2) == u/2 then
        u = u/2
    else
        u = 3*u+1
    end
    disp(u)
end

u = input('Saisir un entier naturel u0:')
n = 0
while u <> 1
    if floor(u/2) == u/2 then
        u = u/2
    else
        u = 3*u+1
    end
    n = n+1
end
disp(n)

// Exercice 3
n = input('Saisir un entier naturel n:')
p = 1
for k = 1:n
    p = p*k
end
disp(p)

n = 0
p = 1
while p < 1000
    n = n+1
    p = p*n
end
disp(n)
```



```
n = 0
p = 1
while p <= 5000
    n = n+1
    p = p*n
end
disp(n-1)

n = input('Saisir un entier naturel n:')
p = 1
S = 1/p
for k = 1:n
    p = p*k
    S = S + 1/p
end
disp(S)
```