

1.

(a)

```
def suite(n):
    u = 1
    for k in range(1, n+1):
        u = u + 1/u
    return u
```

(b)

```
def monotonic(n):
    d = suite(1) - suite(0)
    for k in range(1, n):
        if d > (suite(k+1) - suite(k)) < 0:
            return False
    return True
```

2.

import math as m
def terme(n):

```
    u = m.e
    for k in range(2, n+1):
        u = m.exp(u-1) + k-1
    return u
```

$$(u_k = e^{u_{k-1}-1} + k-1)$$