17. Design an algorithm with a natural number, n, as its input which calculates the following formula and writes the result in the standard output: S = ½ + ¼ + … +1/n.

```
        ┌─────────┐
        │  Start  │
        └────┬────┘
             │
             ▼
        ╱──────────╱
       ╱  Read n  ╱
      ╱──────────╱
             │
             ▼
     ┌──────────────┐
     │  result =0   │
     │   i = 2      │
     └──────┬───────┘
             │            ┌─────────┐
             ▼◄───────────│  i++    │
           ╱─╲            └────┬────┘
          ╱   ╲      T          │
         ╱ i<=n╲────────►┌──────────────┐    ┌──────────────┐
         ╲     ╱         │ result = 1/i │───►│  print 1 /i  │
          ╲   ╱          └──────────────┘    └──────────────┘
           ╲─╱
            │ F
            ▼
     ┌──────────────┐      ┌─────────┐
     │ print result │─────►│  Stop   │
     └──────────────┘      └─────────┘
```