```
                    ( start )
                        |
                        v
        +-------------------------------+
        | Set count to 0                |
        | Set category1 to 0            |
        | Set  category2 to 0           |
        | Set category3 to 0            |
        | Set category4 to 0            |
        +-------------------------------+
                        |
                        v
        +-------------------------------+
        | Read a mark                   |
        +-------------------------------+
                        |
                        v
                                        False
                < mark >= 0 > ------------------------------>
                        |
                      True
                        |
                        v
        < mark >= 70 and        True    +------------------+
        < mark <= 100 > --------------> | Add one to       |
                        |               | category4        |
                      False             +------------------+
                        |
                        v
        < mark >= 40 and        True    +------------------+
        < mark <= 69 > --------------> | Add one to       |
                        |               | category3        |
                      False             +------------------+
                        |
                        v
        < mark >= 30 and        True    +------------------+
        < mark <= 39 > --------------> | Add one to       |
                        |               | category2        |
                      False             +------------------+
                        |
                        v
        < mark >= 0 and         True    +------------------+
        < mark <= 29 > --------------> | Add one to       |
                        |               | category1        |
                        |               +------------------+
                        v
        < mark >= 0 and         True    +------------------+
        < mark <= 100 > -------------> | Add one to count |
                        |               +------------------+
                        v
        +-------------------------------+
        | Read a mark                   |
        +-------------------------------+
```

!!!Student to work out how
   to display histograms!!!