1. In decimal, what is the index of the string 0101?

2. In human terms, what strings are in $L(M_{8864851004796891464536615})$?

3. In binary, what is the smallest $i$ such that $L(M_i) = \emptyset$?

4. In binary, what is the smallest $i$ such that $L(M_i) \neq \emptyset$?

5. In binary, what is the smallest $i$ such that $L(M_i) = \{\lambda\}$?

6. In binary, what is the smallest $i$ such that $L(M_i)$ is infinite?

7. In binary, what is the smallest $i$ such that $L(M_i) = \Sigma^*$?

8. In binary, what is the smallest $i$ such that $\langle M_i \rangle \in L(M_i)$?