Q.1 Design a MDFA over $\Sigma = \{a, b\}$ such that every String accepted must start with $\omega$

here

1) $\omega = 'a'$    $L = \{a, aa, aaa, \cdots\}$

2) $\omega = 'ba'$    $L = \{ba, bab, baa, \cdots\}$

3) $\omega = 'abb'$   $L = \{abb, abba, abbb \cdots\}$

Q.2 Design a MDFA over $\Sigma = \{a, b\}$ such that every String accepted must ends with a substring $\omega$

i) $\omega = bb$    $L = \{bb, abb, bbb \cdots\}$

ii) $\omega = ab$    $L = \{ab, aab, bab, \cdots\}$

iii) $bab$    $L = \{bab, abab, bbab, \cdots\}$

Q.3 Design a MDFA over $\Sigma = \{a, b\}$ such that every accepted string must contain a substring $\omega$

i) $aa$    $L = \{aa, baab, aaab \cdots\}$

ii) $ba$    $L = \{ba, ababb, abaaa, bba \cdots\}$

iii) $abb$   $L = \{abb, aabb, \cdots\}$

Q.4 Design a MDFA over $\Sigma = \{a, b\}$ such that every Substring accepted must ~~contain~~ Start and ends

with $a$    $L = \{a, aa, aba, ababa \cdots\}$