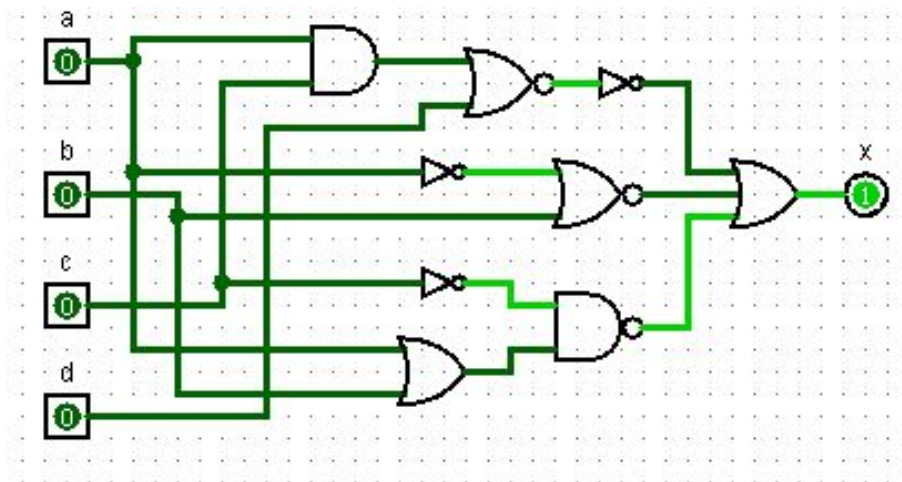
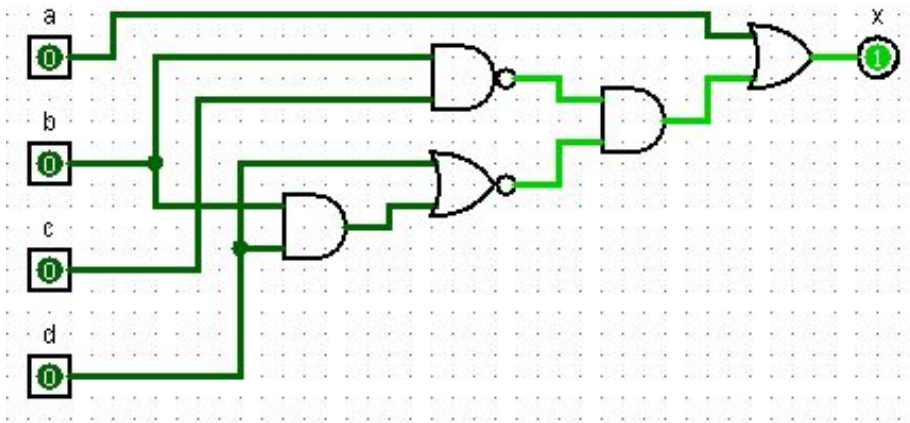


1-A,1.1)



1-A,1.2)



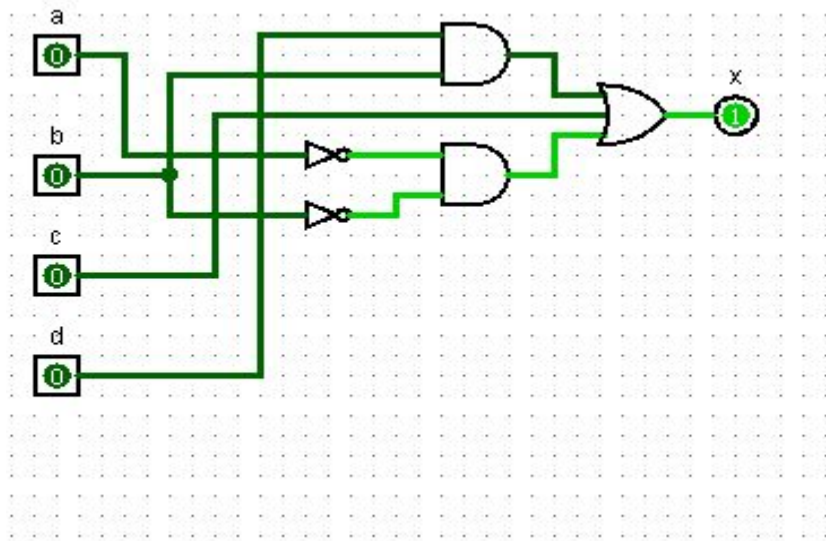
1-B,1.1)

$$\begin{aligned}
 & 1-1.1 \\
 & \overline{A.C + D + \bar{A} + B + \bar{C}(A+B)} \\
 & \overline{A.C + D} \cdot \overline{\bar{A} + B} + \overline{\bar{C}(A+B)} \\
 & (\overline{A.C + D}) \cdot \overline{\bar{A} + B} + \overline{\bar{C}(A+B)} \\
 & (\overline{A.C + D}) \cdot (\bar{A} + B) + \overline{\bar{C}(A+B)} \\
 & (\overline{A.C + D}) \cdot (\bar{A} + B) + \bar{C} \cdot \overline{(A+B)} \\
 & (\overline{A.C + D}) \cdot (\bar{A} + B) + \bar{C} + \bar{A} \cdot \bar{B} \\
 & (\bar{A} + B)A.C + (\bar{A} + B)D + \bar{C} + \bar{A} \cdot \bar{B} \\
 & (\bar{A} + B) \cdot D + \bar{C} + \bar{A} \cdot \bar{B} \\
 & D \cdot \bar{A} + D \cdot B + \bar{C} + \bar{A} \cdot \bar{B} \\
 & D \cdot B + \bar{C} + \bar{A} \cdot \bar{B}
 \end{aligned}$$

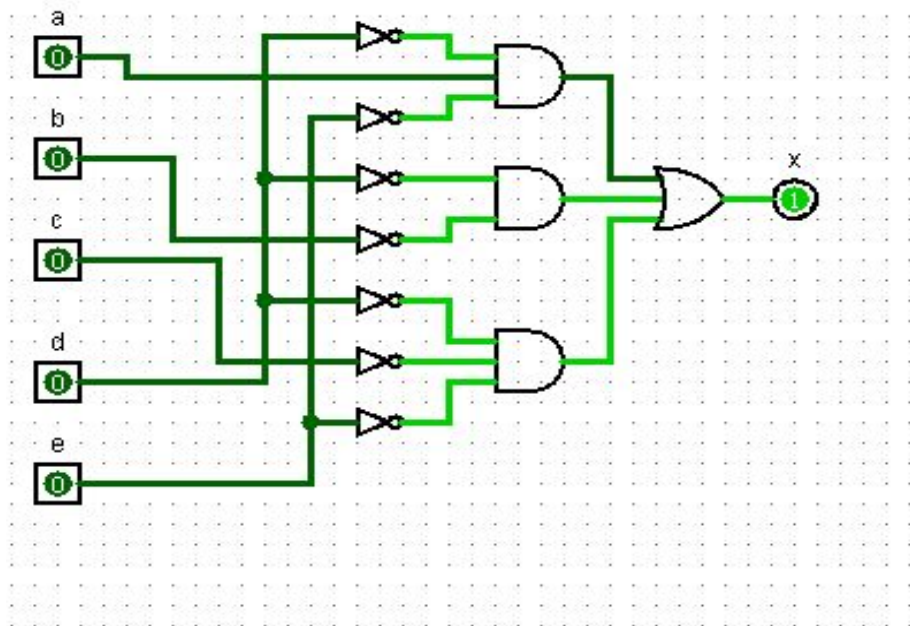
1-B,1.2)

$$\begin{aligned}
 & 1-1.2 \\
 & P = (A + (\bar{B} \cdot \bar{C})) \cdot (\bar{D} + B \cdot E) \\
 & (A + \bar{B} \cdot \bar{C}) \cdot \bar{D} (\bar{B} + \bar{E}) \\
 & (A + \bar{B} + \bar{C}) \cdot \bar{D} (\bar{B} + \bar{E}) \\
 & \bar{D}A \cdot \bar{B} + \bar{D}A \cdot \bar{E} + \bar{D}(\bar{B} + \bar{E}) \bar{B} + \bar{D}(\bar{B} + \bar{E}) \bar{C} \\
 & \bar{D}A \cdot \bar{B} + \bar{D}A \cdot \bar{E} + \bar{D} \cdot \bar{B} + \bar{D} \cdot \bar{B} \cdot \bar{E} + \bar{D}(\bar{B} + \bar{E}) \cdot \bar{C} \\
 & \bar{D}A \cdot \bar{E} + \bar{D} \cdot \bar{B} + \bar{D} \cdot (\bar{B} + \bar{E}) \cdot \bar{C} \\
 & \bar{D}A \cdot \bar{E} + \bar{D} \cdot \bar{B} + \bar{D} \cdot \bar{C} \cdot B + \bar{B} \cdot \bar{C} \cdot \bar{E} \\
 & \bar{D}A \cdot \bar{E} + \bar{D} \cdot B + \bar{D} \cdot \bar{C} \cdot \bar{E}
 \end{aligned}$$

1-C,1.1)



1-C,1.2)



2)

$$2. S = (B.D) + (\bar{A}.\bar{C}) + (\bar{B}.C.\bar{D})$$

$$\overline{(B.D.A.C.B.C.D)}$$