

# Switching Circuit & Logic Design

Lecture 12 : Recap

---

# Number System -- Conversion

---

- Convert Decimal to Binary
- Convert Hexadecimal to Decimal
- Convert Octal to Hexadecimal
- Convert Decimal to Octal

# Number System – Negative numbers

---

- Sign Representation
  - 1's Complement
  - 2's Complement
-

# Boolean Algebra

---

- Demorgan's Law
  - Reduction
-

# Design of Logic Circuit

---

- $F = AB + A'B'$
- Implement with NAND
- Implement with NOR

# Design of Logic Circuit

---

- $F = A'BC + AB'C + A'B'C'$
- Implement with NAND
- Implement with NOR

# Karnaugh Map

---

- Reduction with SOP and POS
- $F = \Sigma_m(0, 2, 4, 6, 7, 8, 10, 12, 13, 15)$