

**CSE 101 - Introduction to Programming**  
**Tutorial 1**

Q1. What are the bases in the following number systems?

- a. Decimal
- b. Binary
- c. Octal
- d. Hexadecimal

Q2. What are the set of valid digits in the following number systems?

- a. Decimal
- b. Binary
- c. Octal
- d. Hexadecimal

Q3. Convert from Decimal to Binary:

- a. 614
- b. 0.1640625

Q4. Convert from Binary to Decimal:

- a. 11001001
- b. 110010.01

Q5. Convert from Hexadecimal to Binary:

- a. FAB1
- b. 1234

Q6. Convert from Binary to Hexadecimal and Octal:

- a. 11011100
- b. 10101

Q7. Convert into offset and 2's complement with 8 bit representation:

- a. 6
- b. -25

Q8. Perform operation using 2's complement the following operations:

- a. 55 - 3
- b. 7 - 120

Q9. What is the range of numbers that can be represented using 8 bits in 2's complement form?

Q10. What is the range of numbers that can be represented using 8 bits in Offset or Biased representation?