**Assignment 2**

1. **Perform the binary addition:  
   a.1011₂ + 1101₂  
   b.100101₂ + 110011₂  
   c.11110₂ + 10101₂  
   d.110111₂ + 101101₂  
   e.1000111₂ + 1110001₂**
2. **Convert 25₁₀ and 17₁₀ to binary, then add them.**
3. **Add the following binary numbers and verify by converting to decimal:  
   11101₂ + 11010₂**
4. **Add the binary numbers and express the result in decimal:  
   110110₂ + 10101₂**
5. **Perform the binary subtraction:  
   a.11011₂ - 1010₂  
   b.100101₂ - 11011₂  
   c.11110₂ - 10101₂  
   d.10101₂ - 1101₂  
   e.1001001₂ - 110111₂**
6. **Convert 50₁₀ and 27₁₀ to binary, then subtract.**
7. **Subtract the binary numbers and verify by converting to decimal:  
   e.111001₂ - 11011₂**
8. **Find the result of:  
   1011101₂ - 100101₂**
9. **Perform the subtraction and check if the result is negative:  
   10010₂ - 10100₂**