**ISSUES AND SOLUTIONS:**

* FACED ISSUES TO INPUT CHARACTERS IN THE FORM OF HEXADECIMAL STRING TO AN HEXADECIMAL NUMBER WHERE THE CHARACTER CAN HAVE ALPHABETS FROM A TO F AND DIGITS. USED STRTOL TO CONVERT THE HEX STRING TO HEX
* HEX DUMP FACED ISSUE WHEN PAGE ADDRESS OF HEX START ADDRESS AND HEX END ADDRESS ARE DIFFERENT. LATER ON CHANGED THE PAGE ADDRESS, WHICH IS PART OF THE SLAVE ADDRESS AND STARTIED PRINTING CORRECT VALUE OF ADDRESS.
* COULD NOT GET WRITE BYTE WORKING WHEN PRINTED ONE AFTER THE OTHER. THEN LEARNT ABOUT ACKNOWLEDGE POLLING AND SOLVED THE ISSUE. AFTER SOLVING, THE ACKNOWLEGEMENT WAS RECEIVED AND COULD WRITE DATA IN SEQUENTIAL MANNER.
* PROBLEM WITH ENTER BEING TAKEN AS A CHARACTER. TOOK ASCII VALUE OF IT,13 AND MADE USER REENTER CHARACTER.
* DURING HEX DUMP, SEQUENTIAL READ WAS PERFORMED FROM START HEX ADDRESS TO END HEX ADDRESS. SO, IF HEX ADDRESS IS NOT A MULTIPLE OF SIXTEEN, COULD NOT FIGURE HOW TO PRINT THE FIRST LINE 16 TIMES. TOOK A DIFFERENCE OF END AND START HEX ADDRESS AND SEND THE WORD ADDRESS BEFORE FOR LOOP TO ENTER THE VALUE OF DATA AND ADDRESS IN THE CORRECT MANNER.
* PROBLEM OF RECEIVING ACKNOWLEDGE AT END OF READ DATA. SEND DELAY BETWEEN WRITE AND READ OPERATIONS TO SOLVE THE ISSUE.
* USED ARRAYS EARLIER FOR SEQUENTIAL READ WHERE ARAY SIZE NEEDED TO BE MENTIONED. FOR LARGE VALUE OF ARRAY ADDRESS, THE PROGRAM PRINTED GARBAGE VALUES AT THE CODE LOCATION. ISSUE SOLVED BY TAKING VALUE OF READ OPERATION IN A SINGLE VARIABLE AND PRINTING IT CONTINUOUSLY IN A FOR LOOP.
* COULD NOT GET PROPER COMMUNICATION SIGNALS ON THE LOGIC ANALYSER. NEEDED TO CHANGE SETTINGS WITH POST FILL TIME LIMIT OF 10 SEC, TRIGGER IMMEDIATELY WHEN ACQUISITION STARTS, SAMPLE FREQUNCY TO 500KHZ. ALSO, FOR SOME OPERATIONS, DID NOT GET THE START SIGNAL. MADE SDA HIGH INITIALLY SO THAT START SIGNAL CAN PROCEED.
* DID NOT KNOW THE DIFFERENCE BETWEEN MASTER SENDING ACK AND EEPROM SENDING ACK. WHEN MASTER SENDS ACK MADE SDA LOW AND SENT A CLOCK PULSE DURING THAT TIME. FOR EEPROM TO SEND ACK, MADE SDA HIGH AND SENT A CLOCK PUSLE TO WIAT FOR EEPROM TO MAKE SEND ACK BY MAKING SDA LOW.
* USED FOR LOOP TO PRINT SAME VALUE OF DATA WITH AN ACKNOWLEDGEMENT TO WRITE TO THE PAGE ADDRESS. WHEN USED PRINT STATEMENTS IN BETWEEN, THE VALUE OF WRITE DATA COUL NOT BE WRITTEN PROPERLY.
* HAD ISSUES WITH GETTING READ AFTER HEX DUMP. OBSERVED THAT SDA SIGNAL WAS REMAINING LOW BEFIRE THE READ CYCLE AND HENCE ONLY READING DURING THE SECOND READ OPERATION. MADE SDA HIGH AND GOT THE READ OUTPUT CORRECT
* TOOK REFERENCE OF A DOUBT OF I2C CODE ON A FORUM AND UNDERSTOOD THE I2C IMPLEMENTATION AND MADE CHANGES TO THE CODE BY LEARNING ABOUT READ, WRITE, SEQUENTIAL READ, PAGE WRITE CYCLES, WHICH SPECIFIED WHERE ACK, NACK NEEDS TO BE THERE, WHERE SDA, SCL WILL BE LOW OR HIGH, AND WHO IS THE RECEIVER, WHICH WILL DECIDE WHO WILL SEND THE SIGNALS.