Set of experiments for 8085 µp.

① Add two BCD/ hexadecimal no.s of 16 bit/ 32 bit width.

② Add two 32 bit sin no.s

③ exchange the content of two memory locations

(b) Add a set of 8 bit no.s stored in an array.

(c) Given an integer determine if the no. is +ve or -ve.

③ Multiply two 8 bit no.s using repeatative addition.

(ii) Multiply two 8 bit no.s using shift and.

④ split a given array of 8 bit no.s into two diff. array containing odd and even no.s.

(ii) for odd and even elements.

(iii) move the content of a block of memory to another memory location by using stack pointer

⑤ Arrange a set of no.s in ascending and descending orders using bubble short algorithm.

⑥ Devide a 16 bit no. by a 8 bit no.

quotient - 16 bit

Remainder - 8 bit

Set of exp. for 8086 µp.

① Addition of two 16 bit BCD no.s with / without carry.

(b) Addition of two 32 bit no.s

(c) Addition of two sign hexadecimal no.s.

② (a) subtraction of two 32 bits no.

(b) Multiplication of two 16 bit no.s

(c) Addition of (8 bit) sign and unsign no.s using a loop with the array starting at some specified memory location

③ (a) Multiplication of two 32 bits no.s.

(b) Multiplication of two sign 8/ 16 bits no.s

④ (a) To store the elements of an given array in two separate array comprise of even and odd elements.

(b) To move the content from a block in memory location to adiff. memory location using stack.

⑤ arrange a set of given no.s in ascending or descending orders using bubble short algorithm. (using compared instruction)

(b) arrange a set of given no.s using stack

(c) Determine the ~~week~~ bit position containing 1 in a 16 bit no.

⑥ Given a 16 bit no. determine all its factors b/w 0 and 9.

⑦ Multiply two 32 bit no.s to get 64 bit no.

⑧ Devide 64 bit no. by 32 bit no.
(quotient - 32 bit remainder - 64

⑨ Determine the range of no.s the up can handle.
(a) signed
(b) unsigned.

⑩ Generate a sq. wave of given fq. using 8255 / 8155

② connect 8 leds to 8255 and switch them on and off in given sequence.

③ Generate a sine wave using look up table with the help of digital to analog converter

④ Display the no. of and s by two 7 seg display connected to 8255

⑤ Design a traffic light controller
Design a stopwatch to measure the time of an event upto an accuracy of 10ms

	8085	8086
user program area	4100 - 5FFF	1000 - 3FFF
Assemble command	# A ↵	# A ↵
unassemble	# U ↵	# U ↵
substitute	# S adder ↵	# S B, SW adder ↵
sing step execution	# TR adder ↵	# TR Adder ↵
Go execution	# G adder ↵	# G adder
Register comm	# R ↵	# R

8086 prg

```
MOV AX, 7777
MOV BX, 2222
Add AX, BX
MOV [2000], AX
HLT
```

8085 prg

```
MVI A, 55
MVI B, 44
ADD B
STA 4200
HLT
```