keySize = 16 byte
block size = 512 byte
datapointer = 8 byte
blockpointer = 5 byte
Order = ? , fanout, max

$$n Bp + (n-1)(k+dp) \leq Bsize$$

$$n(5) + n-1(18) \leq 512$$

$$5n + 18n - 18 \leq 512$$

$$5n + 18n \leq 530$$

$$23n \leq 530$$

$$n \leq \frac{530}{23}$$

$$n \leq 23.04$$

key size = 10 bytes

Blocksize = 512 bytes

dp = 8 byte

bp = 5 byte

order of internal

$$nbp + n - 1 \; (keys \;) \leq blocksize$$

$$5n + n - 1 \; (10) \leq 512$$

$$5n + 10n - 10 \leq 512$$

$$15n \leq 522$$

$$n \leq \frac{522}{15}$$

$$n \leq 34.8$$

leaf node

$$n (key + dp) + Bp \leq 512$$

$$n (18) + 5 \leq 512$$

$$18n + 5 \leq 512$$

$$18n \leq 512 - 5$$

$$18n \leq 508$$

$$n \leq \frac{508}{18}$$

$$n \leq 28.18$$