HW 6 Hayan Al-Machnouk 1945954

Q1:- Since $1KB = 2^{10} B$ i.e. offset 10

a) $3085_{10} \Rightarrow 1100\ 0000\ 1101_2$

3 is page # 13 is offset

b) $42095_{10} \Rightarrow 1010\ 0100\ 0110\ 1111$

41 is page # 111 is offset

c) $215201 \Rightarrow 0011\ 0100\ 1000\ 1010\ 0001$

207 is page # 161 is offset

d) $650060 \Rightarrow 1001\ 1110\ 1011\ 0001\ 0000$

634 is page # 784 offset

e) $2000001 \Rightarrow 0001\ 1110\ 1000\ 0100\ 1000\ 0001$

1953 is page # 129 offset

GAMA

Q2 :-

a) $\frac{2^{32}}{2^{12}} = 2^{32-12} = 2^{20} = 1\,MB$

b) $\frac{2^{29}}{2^{12}} = 2^{29-12} = 2^{17} = 128\,KB$

Q8 :- The address in binary form

0x11123456 ⇒ 0001 0001 0001 0010 0011 0100 0101 0110

Since page size is 2^{12}, Page # is 0x456

Remaining bits are displacement on Table