Q1. Given five
memory partitions of 100Kb, 500Kb, 200Kb, 300Kb, 600Kb (in order),
how would the first-fit, best-fit, and worst-fit algorithms place
processes of 212 Kb, 417 Kb, 112 Kb, and 426 Kb (in order)? Which algorithm makes the most efficient use of memory?

First-fit:
212 kb assigned to 500Kb = 500-212=288
417kb assigned to 600kb = 600-417=
112kb assigned to 200kb = 200-112kb=
426kb must wait

Best-fit:
212kb assigned to 300 kb= 300-212=
417kb assigned to 500kb= 500-417=
112kb assigned to 200kb= 200-112=
426kb assigned to 600kb= 600-426=

Worst-fit:
212kb assigned to 600kb = 600-212=
417kb assigned to 500kb = 500-417=
112kb assigned to 300kb = 300-112=
426 kb waiting

Q2. Consider the segment table 2.

Segment No.	Base	Length
0	1219	700
1	2300	14
2	90	100
3	1327	580
4	1952	96

Which of the following logical address will produce trap addressing error?

1. 0, 430
2. 1, 11
3. 2, 100
4. 3, 425
5. 4, 95

Ans: No trap

Segment #	Base	Limit	Base + Limit	Base + Logical
0	1219	700	1219+700=1919	1219+430=1649
1	2300	14	2300+14=2314	2300+11=2311
2	90	100	90+100=190	90+100=190
3	1327	580	1327+580=1907	1327+425=1752
4	1952	96	1952+96=2048	1952+95=2047

If (Base+Logical) is > (Base+Limit), then it is a trap (address error).