Data Structure HW7

41147009S 陳炫佑

Q1

INSERTION SORT

i round	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
-	60	50	20	35	40	91	65	110	70	10
1	50	60	20	35	40	91	65	110	70	10
2	20	50	60	35	40	91	65	110	70	10
3	20	35	50	60	40	91	65	110	70	10
4	20	35	40	50	60	91	65	110	70	10
5	20	35	40	50	60	91	65	110	70	10

QUICK SORT

i round	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
-	60	50	20	35	40	91	65	110	70	10
1	10	50	20	35	40	(60)	65	110	70	91
2	(10)	50	20	35	40	60	(65)	110	70	91
3	10	40	20	35	(50)	60	65	91	70	(110)
4	10	35	20	(40)	50	60	65	70	(91)	110
5	10	20	(35)	40	50	60	65	(70)	91	110

Merge Sort (recursive version)

i round	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
-	60	50	20	35	40	91	65	110	70	10
1	50	60	20	35	40	65	91	110	10	70
2	50	60	20	35	40	65	91	10	70	110
3	20	35	40	50	60	10	65	70	91	110
4	10	20	35	40	50	60	65	70	91	110
5	10	20	35	40	50	60	65	70	91	110

Q2

i round	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
-	60	50	20	35	40	91	65	110	70	10
step 1	10	35	20	60	40	91	65	110	70	50
step 2.1	20	35	50	60	40	91	65	110	70	10
step 2.2	35	40	50	60	70	91	65	110	20	10
step 2.3	40	60	50	110	70	91	65	35	20	10
step 2.4	50	60	65	110	70	91	40	35	20	10
step 2.5	60	70	65	110	91	50	40	35	20	10

Q3

LSD

i	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
goods[i].k	ACD6D	5DD6C	CAB8D	KBI8A	XVJ7D	5CI8C	AAI9D	5AJ8A	KVI8A	BCJ9D
round										
1	KBI8A	5AJ8A	KVI8A	5DD6C	5CI8C	ACD6D	CAB8D	XVJ7D	AAI9D	BCJ9D
2	5DD6C	ACD6D	XVJ7D	KBI8A	5AJ8A	KVI8A	5CI8C	CAB8D	AAI9D	BCJ9D
3	CAB8D	5DD6C	ACD6D	KBI8A	KVI8A	5CI8C	AAI9D	XVJ7D	5AJ8A	BCJ9D
4	CAB8D	AAI9D	5AJ8A	KBI8A	ACD6D	5CI8C	BCJ9D	5DD6C	KVI8A	XVJ7D
5	5AJ8A	5CI8C	5DD6C	AAI9D	ACD6D	BCJ9D	CAB8D	KBI8A	KVI8A	XVJ7D

MSD

i	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
goods[i].k	ACD6D	5DD6C	CAB8D	KBI8A	XVJ7D	5CI8C	AAI9D	5AJ8A	KVI8A	BCJ9D
round										
1	5DD6C	5CI8C	5AJ8A	ACD6D	AAI9D	BCJ9D	CAB8D	KBI8A	KVI8A	XVJ7D
2	5AJ8A	5CI8C	5DD6C	AAI9D	ACD6D	BCJ9D	CAB8D	KBI8A	KVI8A	XVJ7D
3	5AJ8A	5DD6C	5DD6C	AAI9D	ACD6D	BCJ9D	CAB8D	KBI8A	KVI8A	XVJ7D
4	5AJ8A	5DD6C	5DD6C	AAI9D	ACD6D	BCJ9D	CAB8D	KBI8A	KVI8A	XVJ7D
5	5AJ8A	5CI8C	5DD6C	AAI9D	ACD6D	BCJ9D	CAB8D	KBI8A	KVI8A	XVJ7D