

# Data Structure HW7

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## 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
	20	35	40	50	60	91	total			

### QUICK SORT

1 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	40	20	35	50	60	65	110	70	91
3	10	35	20	40	50	60	65	110	70	91
4	10	20	35	40	50	60	65	110	70	91
5	10	20	35	40	50	60	65	91	70	110
	10	20	35	40	50	60	total			

## MERGE SORT

1 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
	10	20	35	40	50	60	total			

Q2

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

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

<b>i</b>	<b>[0]</b>	<b>[1]</b>	<b>[2]</b>	<b>[3]</b>	<b>[4]</b>	<b>[5]</b>	<b>[6]</b>	<b>[7]</b>	<b>[8]</b>	<b>[9]</b>
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