Homework 4 Comments

Example

- 300 Integers
- 5 Integers per page
- 4 page buffers
- Partial Sort: Sort 20 integers at a time creating 15 sorted sequences (ceiling(300/20) = 15)
- First Merge Phase: Merge 3 sorted sequences into 1 creating 5 sorted sequences (ceiling(15/3) = 5)
- Second Merge Phase: Merge 3 sorted sequences into 1 creating 2 sorted sequences (ceiling(5/3) = 2)
- Third Merge Phase: Merge 3 sorted sequences into 1 creating 1 sorted sequence (ceiling(2/3) = 1)

10203235	12 19 37 52	891420	8
6076	66	88	
95	86	95	Output
101	95	101	Page
111	120	117	
119	123	137	
 Input	 Input	 Input	

<u>10</u>	<u>12</u>	8	8
<u>10</u> 20	19	9	9
32	37	14	
35	52	20	
60	60	47	
76	66	88	
95	86	95	Output
101	95	101	Page
111	120	117	
119	123	137	
•••		•••	
Input	Input	Input	

10203235	12193752	8 9 14 20
6076	66	88
95	86	95
101	95	101
111	120	117
119	123	137
nput	 Input	 Input

8 9 10

Output Page

10	<u>12</u>	8
<u>20</u>	19	9
20323560	37	<u>14</u>
35	52	20
60	60	47
76	66	88
95	86	95
101	95	101
111	120	117
119	123	137
•••	•••	•••
nput	Input	Input

Output Page

10	12	8
<u>20</u>	<u>19</u> 37	9
32	37	<u>14</u>
203235	52	20
60	60	47
76	66	88
95	86	95
101	95	101
111	120	117
119	123	137
•••	•••	•••
nput	Input	Input

Output Page

10	12	8	19
<u>20</u>	<u>19</u> 37	9	
<u>20</u> 32	37	14	
35	52	<u>20</u>	
60	60	47	
76	66	88	
95	86	95	Output
101	95	101	Page
111	120	117	
119	123	137	
•••	•••	•••	
Input	Input	Input	

Homework 4 Due Date Extension

Saturday May 8