

Лабораторна робота 3а

“Автоматичний режим “benchmark” з вимірами ефективності роботи різних механізмів зберігання”

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ІПС-11

```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 10
Time taken by INSERTION SORT: 1 microseconds
Time taken by QUICK SORT: 4 microseconds
Time taken by MERGE SORT: 2 microseconds
Time taken by COMBINE SORT: 1 microseconds
Time taken by STANDART SORT: 2 microseconds
```

```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 20
Time taken by INSERTION SORT: 3 microseconds
Time taken by QUICK SORT: 7 microseconds
Time taken by MERGE SORT: 13 microseconds
Time taken by COMBINE SORT: 2 microseconds
Time taken by STANDART SORT: 5 microseconds
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```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 40
Time taken by INSERTION SORT: 8 microseconds
Time taken by QUICK SORT: 7 microseconds
Time taken by MERGE SORT: 10 microseconds
Time taken by COMBINE SORT: 7 microseconds
Time taken by STANDART SORT: 10 microseconds
```

```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 80
Time taken by INSERTION SORT: 24 microseconds
Time taken by QUICK SORT: 15 microseconds
Time taken by MERGE SORT: 22 microseconds
Time taken by COMBINE SORT: 24 microseconds
Time taken by STANDART SORT: 22 microseconds
```

```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 160
Time taken by INSERTION SORT: 84 microseconds
Time taken by QUICK SORT: 29 microseconds
Time taken by MERGE SORT: 47 microseconds
Time taken by COMBINE SORT: 36 microseconds
Time taken by STANDART SORT: 47 microseconds
```

```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 320
Time taken by INSERTION SORT: 270 microseconds
Time taken by QUICK SORT: 57 microseconds
Time taken by MERGE SORT: 98 microseconds
Time taken by COMBINE SORT: 55 microseconds
Time taken by STANDART SORT: 99 microseconds
```

```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 640
Time taken by INSERTION SORT: 1050 microseconds
Time taken by QUICK SORT: 126 microseconds
Time taken by MERGE SORT: 207 microseconds
Time taken by COMBINE SORT: 125 microseconds
Time taken by STANDART SORT: 214 microseconds
```

```
Input mode of work
d - demonstration
b - benchmark
Enter request:b
Enter count of element: 1000
Time taken by INSERTION SORT: 2659 microseconds
Time taken by QUICK SORT: 211 microseconds
Time taken by MERGE SORT: 319 microseconds
Time taken by COMBINE SORT: 206 microseconds
Time taken by STANDART SORT: 378 microseconds
```

Бачимо, що комбіноване сортування дуже добре виконує свою задачу, є найоптимальнішим на будь-якому наборі