Třídění

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Osnova přednášky

Třídění

- RadixSort

RadixSort

```
1 int GetBit(const int Value, const int BitPosition)
2 {
3    return (Value >> BitPosition) & 1;
4 }
```

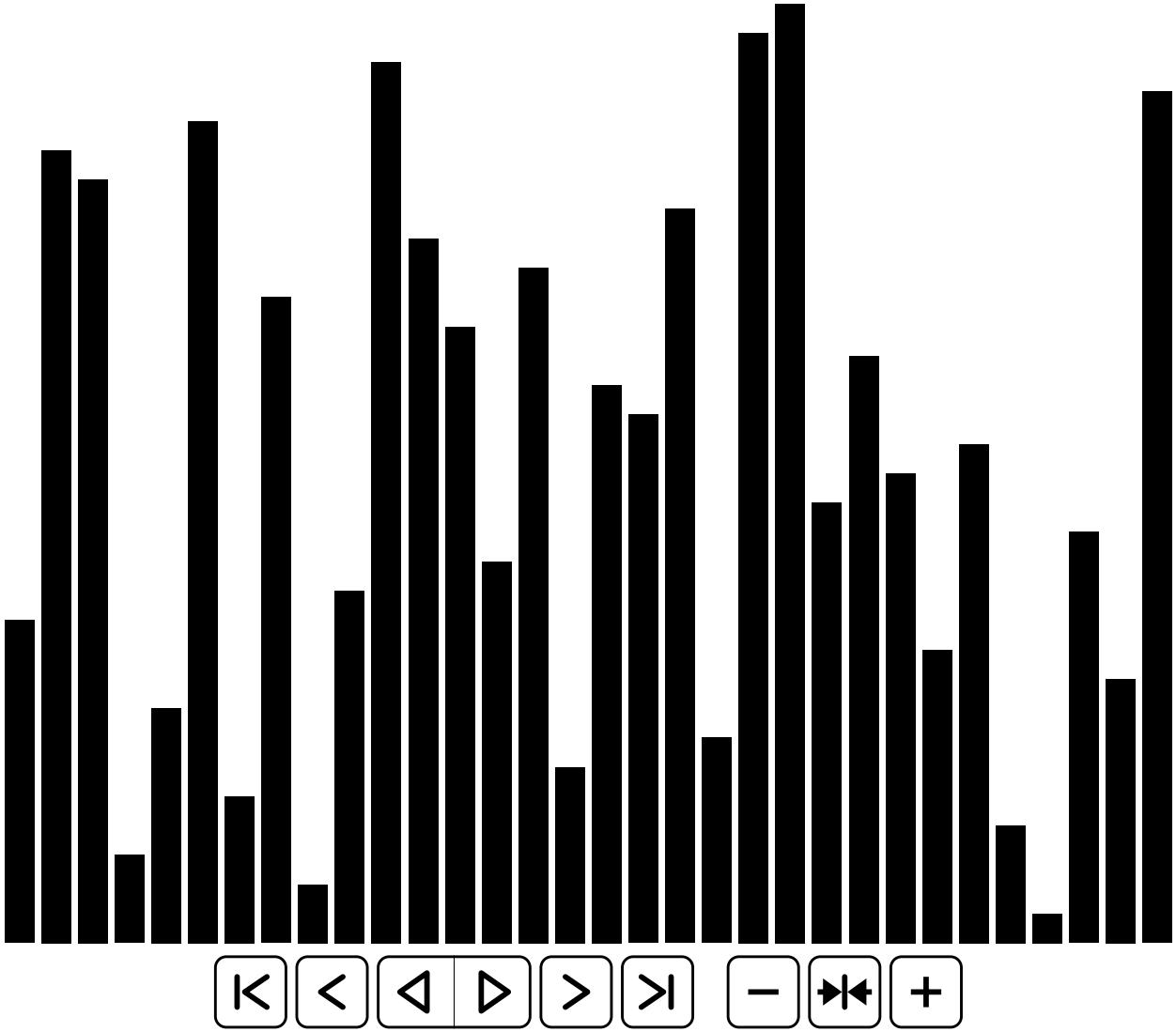
RadixSort

```
1  void RadixSortInternal(int a[], const int l, const int r, const int b)
2  {
3     if (r > l && b >= 0)
4     {
5        int i = l;
6        int j = r;
7        do
8        {
9           while (GetBit(a[i], b) == 0 && i < j)
10             i++;
11          while (GetBit(a[j], b) == 1 && i < j)
12             j--;
13          Exchange(a[i], a[j]);
14       } while (j != i);
15       if (GetBit(a[r], b) == 0)
16          j++;
17       RadixSortInternal(a, l, j - 1, b - 1);
18       RadixSortInternal(a, j, r, b - 1);
19    }
20 }
```

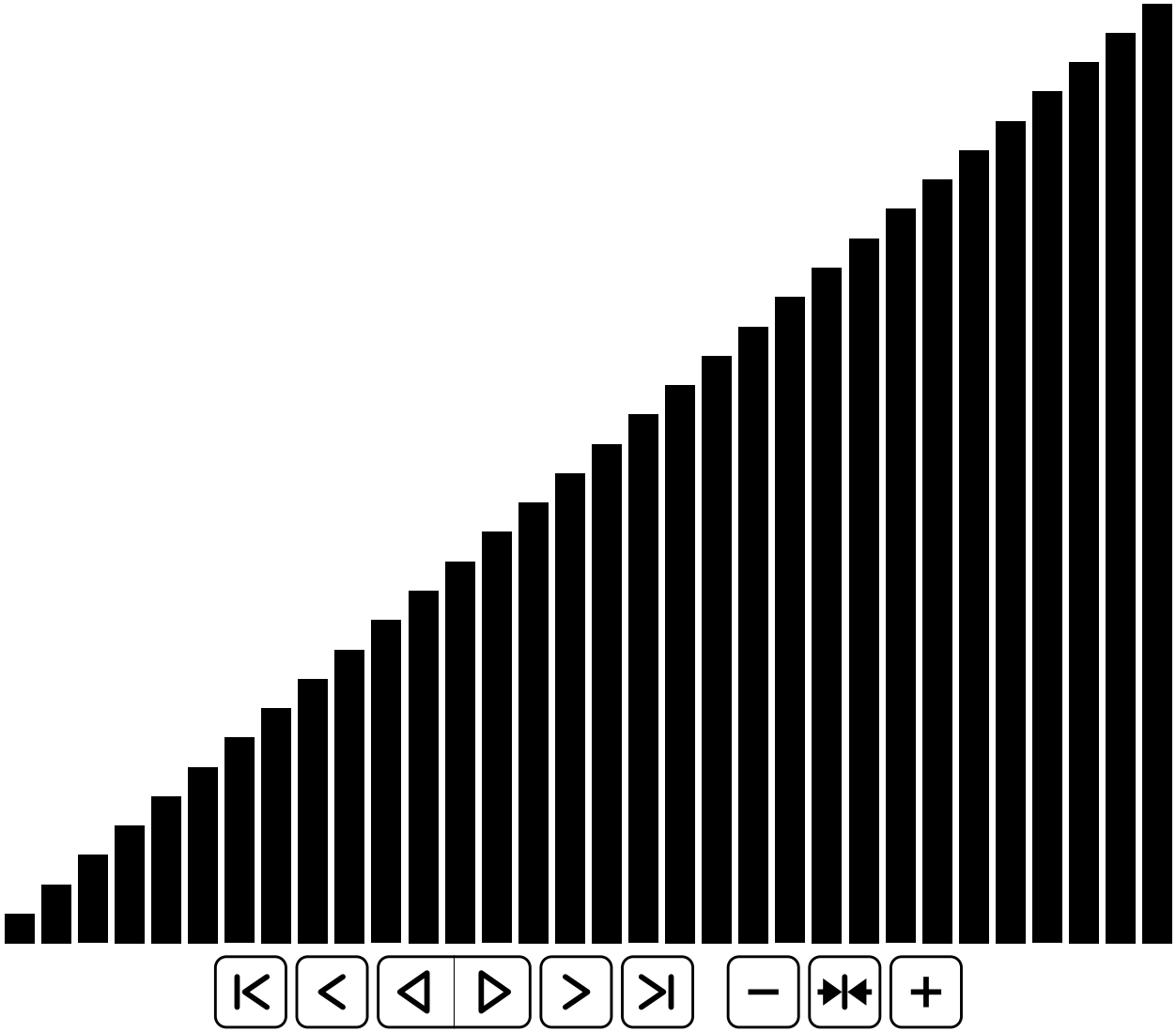
RadixSort

```
1 void RadixSort(int a[], const int n)
2 {
3    const int BitsPerInt = sizeof(int) * CHAR_BIT;
4    RadixSortInternal(a, 0, n - 1, BitsPerInt - 1);
5 }
```

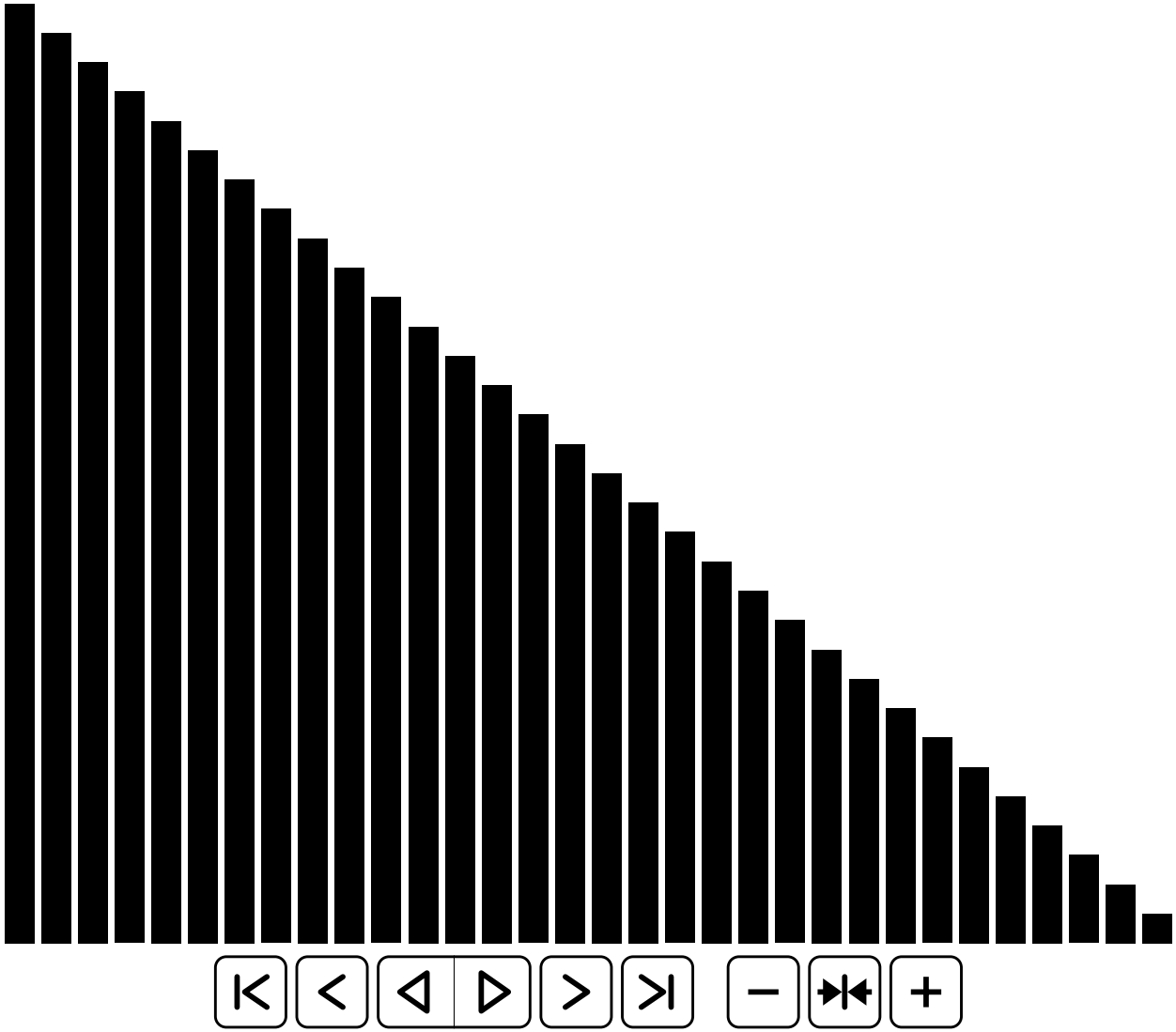
RadixSort – náhodná permutace



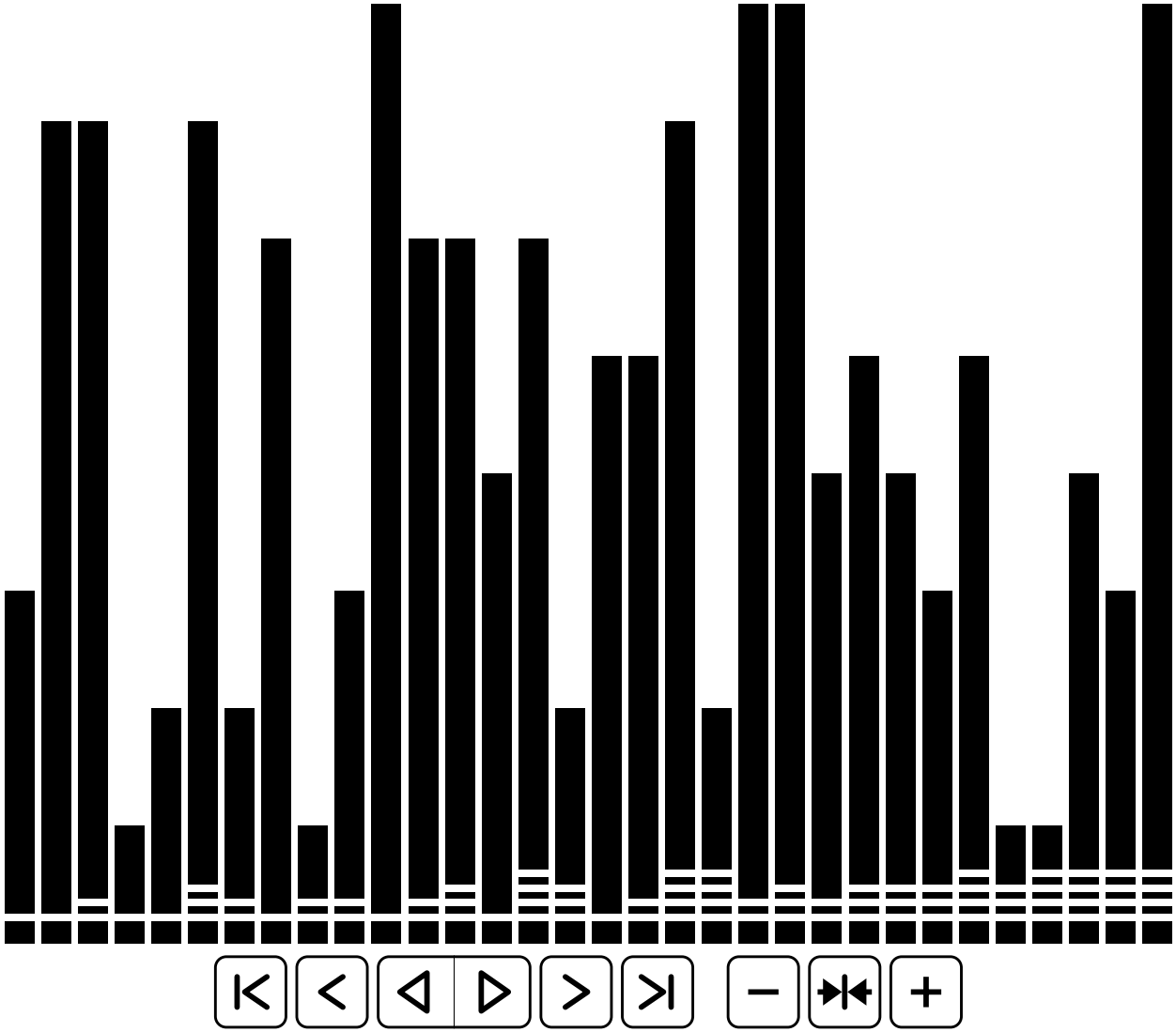
RadixSort – identická permutace



RadixSort – opačná permutace



RadixSort – permutace pouze několika hodnot



Děkuji za pozornost