

```
void hpsel(unsigned long m, unsigned long n, float arr[], float heap[])
```

```
{
    unsigned long i, j, k;
    float swap;
```

①

```
    for(i=1; i<=m; i++)
```

③ heap[i]=arr[i];

```
    sort(m, heap);
```

```
    for(i=m+1; i<=n; i++) {
```

```
        if(arr[i] > heap[i]) {
```

```
            heap[i] = arr[i];
```

```
            for(j=1;;) {
```

```
                k=j << 1;
```

```
                if(k > m)
```

```
                    break;
```

```
                if((k != m) && (heap[k] > heap[k+1]))
```

```
                    k++;
```

```
                if(heap[j] < heap[k])
```

```
                    break;
```

```
                swap = heap[k];
```

```
                heap[k] = heap[j];
```

```
                heap[j] = swap;
```

```
                j=k;
```

```
            }
```

```
        }
```

```
    }
```

4, 2, 4, 5, E

1, 2, 4, 5, 6, EI, EF, 5, ~

1, 2, 4, 5, 6, 7, 8, 9, 10, EI, 12,

EI, 15, 16, EI, EF, 5. ~

7+1=8

1, 2 — 15, EI, 17, EF, 8, ...

1, 2 — 12, 13, EI, 15 —

1, 2. — 13, 14, EI, 15 —

1, 2, — 10, 11, EI, EF —

