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Enroll — 20VCS176

Course — CSE

Sec — A

#include <stdio.h>

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#include <time.h>

void swap(int *num1, int *num2) {

int temp = *num1;

*num1 = *num2;

*num2 = temp;

}

void printArray(int *arr, int length)

{ for (int i = 0; i < length; i++) {

printf("%d ", arr[i]);

}
printf("\n");

}

int *bubbleSort(int *arr, int len)

{ for (int i = 0; i < len; i++) {

for (int j = 0; j < len - 1; j++) {

if (arr[j] > arr[j+1]) {

swap(&arr[j+1], &arr[j]);

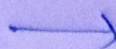
}

}

}

return arr;

}




```
void main() {
```

```
    int arr[] = {5, 4, 3, 2, 1};
```

```
    int length = sizeof(arr) / sizeof(arr[0]);
```

```
    time_t startTick, endTick;
```

```
    startTick = clock();
```

```
    int p* = bubbleSort(arr, length);
```

```
    endTick = clock();
```

```
    time_t ticksTaken = endTick - startTick;
```

```
    double timeTaken = (double) ticksTaken / (double) CLOCKS_PER_SEC;
```

```
    printf("Time take: %lf s\n", timeTaken);
```

```
}
```

Out Put

→ 1 2 3 4 5

→ Time taken : 0.000003 s

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