**package** com;

**class** Queueprogramme {

**private** **static** **int** *front*, *rear*, *capacity*;

**private** **static** **int** *queue*[];

Queueprogramme(**int** size) {

*front* = *rear* = 0;

*capacity* = size;

*queue* = **new** **int**[*capacity*];

}

**static** **void** queueEnqueue(**int** item) {

**if** (*capacity* == *rear*) {

System.***out***.printf("\nQueue is fulled\n");

**return**;

}

**else** {

*queue*[*rear*] = item;

*rear*++;

}

**return**;

}

**static** **void** queueDequeue() {

**if** (*front* == *rear*) {

System.***out***.printf("\n Queue is empty\n");

**return**;

}

**else** {

**for** (**int** i = 0; i < *rear* - 1; i++) {

*queue*[i] = *queue*[i + 1];

}

**if** (*rear* < *capacity*)

*queue*[*rear*] = 0;

*rear*--;

}

**return**;

}

**static** **void** queueDisplay() {

**int** i;

**if** (*front* == *rear*) {

System.***out***.printf("Queue is Empty\n");

**return**;

}

**for** (i = *front*; i < *rear*; i++) {

System.***out***.printf(" %d , ", *queue*[i]);

}

**return**;

}

**static** **void** queueFront()

{

**if** (*front* == *rear*) {

System.***out***.printf("Queue is Empty\n");

**return**;

}

System.***out***.printf("\nFront Element of the queue: %d", *queue*[*front*]);

**return**;

}

}

**public** **class** QueueArrayImplementation {

**public** **static** **void** main(String[] args) {

Queueprogramme queue1 = **new** Queueprogramme(4);

System.***out***.println("Initial Queue:");

queue1.*queueDisplay*();

queue1.*queueEnqueue*(70);

queue1.*queueEnqueue*(30);

queue1.*queueEnqueue*(10);

queue1.*queueEnqueue*(50);

System.***out***.println("Queue after Enqueue Operation:");

queue1.*queueDisplay*();

queue1.*queueFront*();

queue1.*queueEnqueue*(90);

queue1.*queueDisplay*();

queue1.*queueDequeue*();

queue1.*queueDequeue*();

System.***out***.printf("\nQueue after two dequeue operations:");

queue1.*queueDisplay*();

queue1.*queueFront*();

}

}

