```
class Queue:
    # max_size: size of Q
    # Q: Array
    def __init__(self, max_size):
        self.max_size = max_size
        self.Q = [0] * max_size
        self.num = 0
        self.first = 0

    def enqueue(self, item):
        if self.num >= self.max_size:
            raise Exception("Queue overflow")
        self.Q[(self.num + self.first) % self.max_size] = item
        self.num += 1

    def dequeue(self):
        if self.num == 0:
            raise Exception("Queue empty")
        item = self.Q[self.first]
        self.first = (self.first + 1) % self.max_size
        self.num -= 1
        return item

    def front(self):
        if self.num == 0:
            raise Exception("Queue empty")
        return self.Q[self.first]

    def is_empty(self):
        return self.num == 0

    def size(self):
        return self.num

    def is_full(self):
        return self.num >= self.max_size

    def get_item(self, i):
        if i < 0 or i >= self.num:
            raise Exception("Index out of range")
        return self.Q[(self.first + i) % self.max_size]

# Rest of the program...

if __name__ == "__main__":
    # Rest of the program as previously provided...
```