

```
package stacksqueues;

//Java program to find circular tour for a truck

class Petrol
{
    // A petrol pump has petrol and distance to next petrol pump
    static class petrolPump
    {
        int petrol;
        int distance;

        // constructor
        public petrolPump(int petrol, int distance)
        {
            this.petrol = petrol;
            this.distance = distance;
        }
    }

    // The function returns starting point if there is a possible solution,
    // otherwise returns -1
    static int printTour(petrolPump arr[], int n)
    {
        int start = 0;
        int end = 1;
        int curr_petrol = arr[start].petrol - arr[start].distance;

        // If current amount of petrol in truck becomes less than 0, then
        // remove the starting petrol pump from tour
        while(end != start || curr_petrol < 0)
        {
            // If current amount of petrol in truck becomes less than 0, then
            // remove the starting petrol pump from tour
            while(curr_petrol < 0 && start != end)
            {
                // Remove starting petrol pump. Change start
                curr_petrol -= arr[start].petrol - arr[start].distance;
                start = (start + 1) % n;

                // If 0 is being considered as start again, then there is no
                // possible solution
                if(start == 0)
                    return -1;
            }
            // Add a petrol pump to current tour
            curr_petrol += arr[end].petrol - arr[end].distance;

            end = (end + 1) % n;
        }

        // Return starting point
        return start;
    }

    // Driver program to test above functions
    public static void main(String[] args)
    {
        petrolPump[] arr = {new petrolPump(6, 4),
                            new petrolPump(3, 6),
                            new petrolPump(7, 3)};

        int start = printTour(arr, arr.length);
    }
}
```

```
System.out.println(start == -1 ? "No Solution" : "Start = " + start);  
  
}  
  
}  
//This code is contributed by Sumit Ghosh
```