**package** Question10;

//FInd Equilibrium Index

**public** **class** EquilibriumIndex {

**int** equilibrium(**int** arr[], **int** n)

{

**int** sum = 0;

**int** leftsum = 0;

**for** (**int** i = 0; i < n; ++i)

sum += arr[i];

**for** (**int** i = 0; i < n; ++i)

{

sum -= arr[i];

**if** (leftsum == sum)

**return** i;

leftsum += arr[i];

}

**return** -1;

}

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

{

EquilibriumIndex equi = **new** EquilibriumIndex();

**int** arr[] = {-7, 1, 5, 2, -4, 3, 0};

**int** arr\_size = arr.length;

System.***out***.println("First equilibrium index is " +

equi.equilibrium(arr, arr\_size));

}

}