```
//FirsrFit
import java.util.Scanner;
public class FirstFit {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        // Input the number of memory blocks
        System.out.print("Enter the number of memory blocks: ");
        int numBlocks = scanner.nextInt();
        int[] memoryBlocks = new int[numBlocks];
        boolean[] isBlockUsed = new boolean[numBlocks]; // Track used blocks

        // Input the size of each memory block
        System.out.println("Enter the size of each memory block:");
        for (int i = 0; i < numBlocks; i++) {
            memoryBlocks[i] = scanner.nextInt();
        }

        // Input the number of processes
        System.out.print("Enter the number of processes: ");
        int numProcesses = scanner.nextInt();
        int[] processSizes = new int[numProcesses];

        // Input the size of each process
        System.out.println("Enter the size of each process:");
        for (int i = 0; i < numProcesses; i++) {
            processSizes[i] = scanner.nextInt();
        }

        // First Fit allocation
        for (int i = 0; i < numProcesses; i++) {
```

```
        boolean allocated = false;
        for (int j = 0; j < numBlocks; j++) {
            // Check if the block is not used and is large enough
            if (!isBlockUsed[j] && memoryBlocks[j] >= processSizes[i]) {
                System.out.println("Process " + (i + 1) + " of size " + processSizes[i] + " allocated to block "
+ (j + 1));
                memoryBlocks[j] -= processSizes[i];
                isBlockUsed[j] = true; // Mark block as used
                allocated = true;
                break;
            }
        }
        if (!allocated) {
            System.out.println("Process " + (i + 1) + " of size " + processSizes[i] + " could not be
allocated.");
        }
      }

      scanner.close();
   }
}
```

//Output -

Enter the number of memory blocks: 5

Enter the size of each memory block:

100

500

200

300

600

Enter the number of processes: 4

Enter the size of each process:

212

417

112

426

Process 1 of size 212 allocated to block 2

Process 2 of size 417 allocated to block 5

Process 3 of size 112 allocated to block 3

Process 4 of size 426 could not be allocated.