

**Sample Input:**

```
alloc P1 5
alloc P2 3
access P1 8192 read
access P1 12288 write
access P2 4096 read
free P1
alloc P3 3
access P3 4309 read
```

**Sample Output:**

```
Allocated 5 pages for process P1
Allocated 3 pages for process P2
Translated virtual address 8192 (P1) → physical address 8192
Translated virtual address 12288 (P1) → physical address 12288
Translated virtual address 4096 (P2) → physical address 24576
Freed memory for process P1
Allocated 3 pages for process P3
Translated virtual address 4309 (P3) → physical address 4309
```

**Screenshot:**

```
alloc P1 5
Allocated 5 pages for process P1
alloc P2 3
Allocated 3 pages for process P2
access P1 8192 read
Translated virtual address 8192 (P1) → physical address 8192
access P1 12288 write
Translated virtual address 12288 (P1) → physical address 12288
access P2 4096 read
Translated virtual address 4096 (P2) → physical address 24576
free P1
Freed memory for process P1
alloc P3 3
Allocated 3 pages for process P3
access P3 4309 read
Translated virtual address 4309 (P3) → physical address 4309
```