

```

switch (n) {
case 1:
    if ((mutex == 1)
        && (empty != 0)) {
        producer();
    }
    else {
        printf("Buffer is full!");
    }
    break;

case 2:

    if ((mutex == 1)
        && (full != 0)) {
        consumer();
    }

    else {
        printf("Buffer is empty!");
    }
    break;

    case 3:
        exit(0);
        break;
}
}
}

```

```

ubuntu@ubuntu: ~/Downloads
ubuntu@ubuntu:~/Downloads$ gcc bankers.c
ubuntu@ubuntu:~/Downloads$ ./a.out

1. Press 1 for Producer
2. Press 2 for Consumer
3. Press 3 for Exit
Enter your choice:1

Producer produces item 1
Enter your choice:1

Producer produces item 2
Enter your choice:2

Consumer consumes item 2
Enter your choice:2

Consumer consumes item 1
Enter your choice:2
Buffer is empty!
Enter your choice:3
ubuntu@ubuntu:~/Downloads$ 

```

```
}

if(flag==1)
{
printf("Following is the SAFE Sequence\n");
for (i = 0; i < n - 1; i++)
    printf(" P%d ->", ans[i]);
printf(" P%d", ans[n - 1]);
}

return (0);
}
```

A terminal window titled 'ubuntu@ubuntu: ~/Downloads' with standard window controls. The terminal shows the compilation of 'producer.c' using 'gcc', followed by the execution of the resulting binary 'a.out'. The program outputs the text 'Following is the SAFE Sequence' followed by a sequence of process identifiers: 'P1 -> P3 -> P4 -> P0 -> P2'.

```
ubuntu@ubuntu:~/Downloads$ gcc producer.c
ubuntu@ubuntu:~/Downloads$ ./a.out
Following is the SAFE Sequence
P1 -> P3 -> P4 -> P0 -> P2ubuntu@ubuntu:~/Downloads$
```