

B1.java

```
import java.util.*;

class B1 {

    static {

        System.loadLibrary("B1");

    }

    private native int add(int a, int b);
    private native int sub(int a, int b);
    private native int mult(int a, int b);
    private native int div(int a, int b);

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);

        int a, b,ch;

        System.out.println("\nEnter value of a : ");
        a = sc.nextInt();

        System.out.println("\nEnter value of b : ");
        b = sc.nextInt();

        do
        {
            System.out.println("\nENTER YOUR CHOICE : ");
            ch = sc.nextInt();
            switch(ch)
            {
                case 1 : new B1().add(a,b);
                    break;
                case 2 : new B1().sub(a,b);
                    break;
                case 3 : new B1().mult(a,b);
                    break;
```

```

        case 4 : new B1().div(a,b);

        break;

        default : System.out.println("Your choice is wrong.");

    }

}while(ch<5);

}

}

```

b1.c

```

#include <jni.h>

#include <stdio.h>

#include "B1.h"

JNIEXPORT int JNICALL Java_B1_add(JNIEnv *env, jobject obj, jint a, jint b)
{
    printf("\n%d + %d = %d\n",a,b,(a+b));

    return;
}

JNIEXPORT int JNICALL Java_B1_sub(JNIEnv *env, jobject obj, jint a, jint b)
{
    printf("\n%d - %d = %d\n",a,b,(a-b));

    return;
}

JNIEXPORT int JNICALL Java_B1_mult(JNIEnv *env, jobject obj, jint a, jint b)
{
    printf("\n%d * %d = %d\n",a,b,(a*b));

    return;
}

JNIEXPORT int JNICALL Java_B1_div(JNIEnv *env, jobject obj, jint a, jint b)
{

```

```
printf("\n%d / %d = %d\n",a,b,(a/b));  
return;  
}
```

Execution Steps:

```
$ javac B1.java
```

```
javah -classpath . B1
```

```
$ ls
```

```
B1.c B1.c~ B1.class B1.h B1.java
```

```
$ gcc -shared -fPIC -I/usr/lib/jvm/default-java/include -I/usr/lib/jvm/default-java/include/linux B1.c -  
o libB1.so
```

```
$ ls
```

```
B1.c B1.c~ B1.class B1.h B1.java libB1.so
```

```
$ java -classpath . -Djava.library.path=. B1
```

```
Hello World!
```