

Dynamic Link Library

C file:

```
#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;
}
```

C Header file:

```
import java.io.*;
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 the value of A: ");
a = sc.nextInt();
System.out.println("\nEnter the value of B: ");
b= sc.nextInt();
do {
System.out.println("\nEnter the 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);
}
}

```

Java File:

```

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)
{
try (Scanner sc = new Scanner(System.in)) {
int a ,b ,ch;
System.out.println("\nEnter the value of A: ");
a = sc.nextInt();
System.out.println("\nEnter the value of B: ");
b= sc.nextInt();
do {
System.out.println("\nEnter the 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("\nYour choice is Wrong !");
}
}while(ch<5);
}
}
}

```

}

Output:

```
ubuntu@ubuntu-HP-Desktop-Pro-G2:~/Downloads/DLL$ ls
B1.c  B1.class  B1.h  B1.java  libB1.so
ubuntu@ubuntu-HP-Desktop-Pro-G2:~/Downloads/DLL$ java -classpath . -Djava.library.path=. B1

Enter the value of A:
10

Enter the value of B:
5

Enter the choice:
1

10 + 5 = 15

Enter the choice:
2

10 - 5 = 5

Enter the choice:
3

10 * 5 = 50

Enter the choice:
4

10 / 5 = 2

Enter the choice:
5
Your choice is Wrong !
ubuntu@ubuntu-HP-Desktop-Pro-G2:~/Downloads/DLL$
```