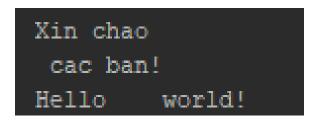
2.2.1 - Write, compile the first Java application



2.2.2 - Write, compile the first dialog Java program

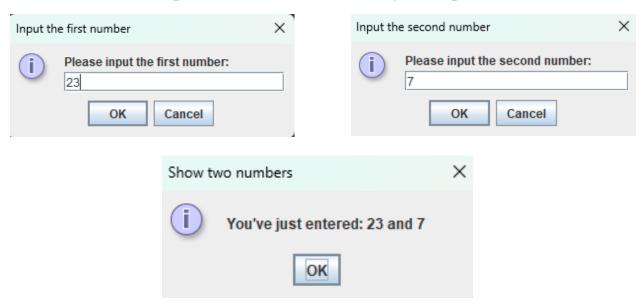


2.2.3 - Write, compile the first input dialog Java application





2.2.4 – Write, compile, and run the following example



2.2.5 - Write a program to calculate sum, difference, product, and quotient of 2 double numbers which are entered by users.

```
run:
Nhap vao a:
15
Nhap vao b:
8
Tong cua 2 so a va b la: 23.0
Hieu cua 2 so a va b la: 7.0
Tich cua 2 so a va b la: 120.0
Thuong cua 2 so a va b la: 1.875
BUILD SUCCESSFUL (total time: 3 seconds)
```

2.2.6 - Write a program to solve

```
run:
Chon Option

1. Giai phuong trinh bac nhat 1 an

2. Giai he phuong trinh bac nhat 2 an

3. Giai phuong trinh bac hai 1 an

4. Thoat chuong trinh
Nhap option:

1
Nhap a:

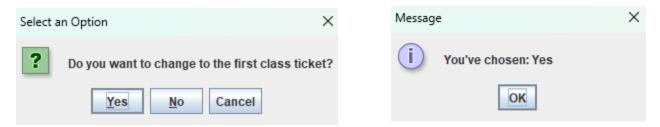
23
Nhap b:

7
Phuong trinh 23.0x + 7.0 = 0
Co nghiem la: x = -0.30434782608695654
```

```
Chon Option
1. Giai phuong trinh bac nhat 1 an
2. Giai he phuong trinh bac nhat 2 an
3. Giai phuong trinh bac hai 1 an
4. Thoat chuong trinh
Nhap option:
all: 3
a21: 5
a12: 2
Ma tran mo rong cua he phuong trinh la:
3.0 5.0 1.0
D = -13.0
D1 = 39.0
He phuong trinh co nghiem duy nhat:
x1 = D1/D = -3.0
x2 = D2/D = 2.0
```

```
Chon Option
1. Giai phuong trinh bac nhat 1 an
2. Giai he phuong trinh bac nhat 2 an
3. Giai phuong trinh bac hai 1 an
4. Thoat chuong trinh
Nhap option:
Nhap a: 1
Nhap b: -5
Nhap c: 2
Phuong trinh co 2 nghiem phan biet:
x1 = 4.561552812808831
x2 = 0.4384471871911697
Chon Option
1. Giai phuong trinh bac nhat 1 an
2. Giai he phuong trinh bac nhat 2 an
3. Giai phuong trinh bac hai 1 an
4. Thoat chuong trinh
Nhap option:
BUILD SUCCESSFUL (total time: 2 minutes 15 seconds)
```

6.1 - Write, compile and run the ChoosingOption program



Questions:

• What happens if users choose "Cancel"?

Khi người dùng chọn "Cancel" trong hộp thoại JOptionPane.showConfirmDialog, chương trình sẽ hiển thị thông báo "You've chosen: No"

Vì điều kiện option == JOptionPane.YES_OPTION là false, nên đoạn mã roi vào trường hợp còn lại.

• How to customize the options to users, e.g. only two options: "Yes" and "No", OR "I do" and "I don't"



6.2 - Write a program for input/output from keyboard

```
run:
What's your name?
Quach Gia Duoc
How old are you?
20
How tall are you (m)?
1.7
Mrs/Ms. Quach Gia Duoc, 20 year old. Your height is 1.7.
BUILD SUCCESSFUL (total time: 14 seconds)
```

6.3 - Write a program to display a triangle with a height of n stars (*), n is entered by users.

6.4 - Write a program to display the number of days of a month, which is entered by users (both month and year). If it is an invalid month/year, ask the user to enter again.

```
run:
Nhap thang:
Feb
Nhap nam:
2004
Thang 2 nam 2004 co 29 ngay
BUILD SUCCESSFUL (total time: 7 seconds)
```

6.5 - Write a Java program to sort a numeric array, and calculate the sum and average value of array elements

```
run:
Nhap so luong phan tu cua mang: 5
Nhap mang
12
16
23
7
-21
Mang vua nhap la: 12 16 23 7 -21
Mang da sap xep: -21 7 12 16 23
Tong cac gia tri cua mang la: 37
Gia tri trung binh cua mang la: 7.4
BUILD SUCCESSFUL (total time: 15 seconds)
```

6.6 - Write a Java program to add two matrices of the same size.

```
Nhap so hang: 2
Nhap so cot: 3
Nhap vao ma tran 1:
Nhap vao ma tran 2:
Ma tran 1:
4 5 6
Ma tran 2:
Tong cua 2 ma tran:
BUILD SUCCESSFUL (total time: 21 seconds)
```