

**EXERCISE 2-1:**

Declare two short variable and try to assign their sum to byte variable and write down what happened.

```
short a=10, b=20;  
byte = a+b;
```

Declare a long variable with value with int range then declare another long variable with value outside the range of int. Write down what happened.

Declare a float variable like this and write down what happened.

```
float a = 12.54;
```

Declare all types of integers and floating point variables and try to give those values outside of their range and then write down the errors.

Create 5 character variable by giving it different hexadecimal codes and write down what characters are shown on screen.

Declare and initialize two character variable with any alphabet value. Then use this statement to print the result and write down what happened.

```
System.out.println (ch1 + ch2);
```

**EXERCISE 2-2:**

Write down a program which has 4 int variables a, b, c and d with different values. Then store the result of equation "a\b + c\d" in a variable "ans" of float data type. The result should be accurate.