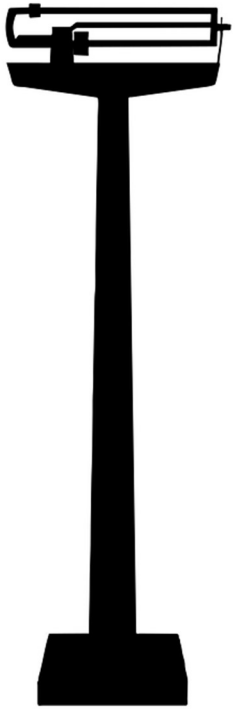
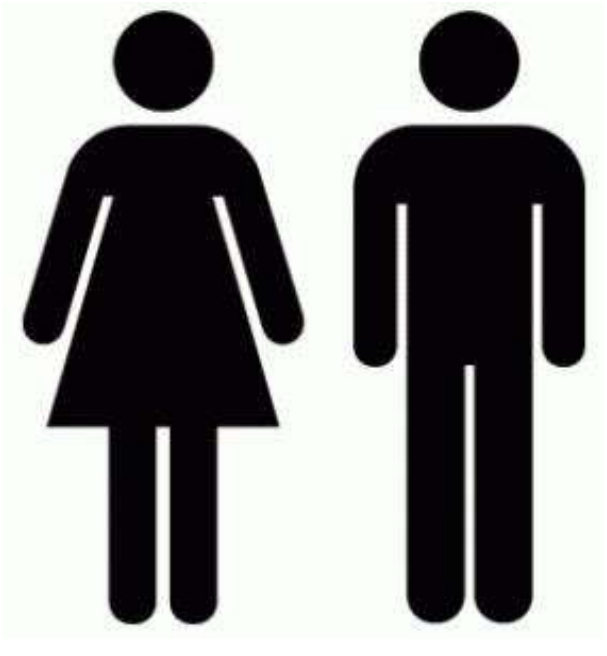
Method Parameters II

1. Parameters and local variables
2. Multiple parameters

Parameters and local variables

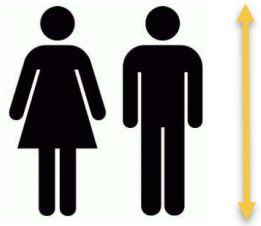
Calculadora peso ideal





1. Parameters and local variables

Calculadora peso ideal

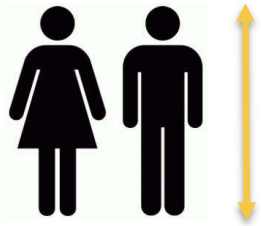


int altura → method

175cm

Tu peso ideal si eres hombre es: 70.4kg
Tu peso ideal si eres mujer es: 65.8kg

Calculadora peso ideal



int altura → calculadoraPesoIdeal

175cm

Tu peso ideal si eres hombre es: 70.4kg
Tu peso ideal si eres mujer es: 65.8kg

Calculadora peso ideal

```
public void calculadoraPesoIdeal(int altura){
        double pesoIdealHombre = (altura-100)-((altura-100-52)*0.2);
        double pesoIdealMujer = (altura-100)-((altura-100-52)*0.4);
        System.out.println("Tu peso ideal si eres hombre es: "+pesoIdealHombre+"kg");
        System.out.println("Tu peso ideal si eres mujer es: "+pesoIdealMujer+"kg");
}
```

Calculadora peso ideal

```
public void calculadoraPesoIdeal(int altura){
        double pesoIdealHombre = (altura-100)-((altura-100-52)*0.2);
        double pesoIdealMujer = (altura-100)-((altura-100-52)*0.4);
        System.out.println("Tu peso ideal si eres hombre es: "+pesoIdealHombre+"kg");
        System.out.println("Tu peso ideal si eres mujer es: "+pesoIdealMujer+"kg");
}
```

Calculadora peso ideal

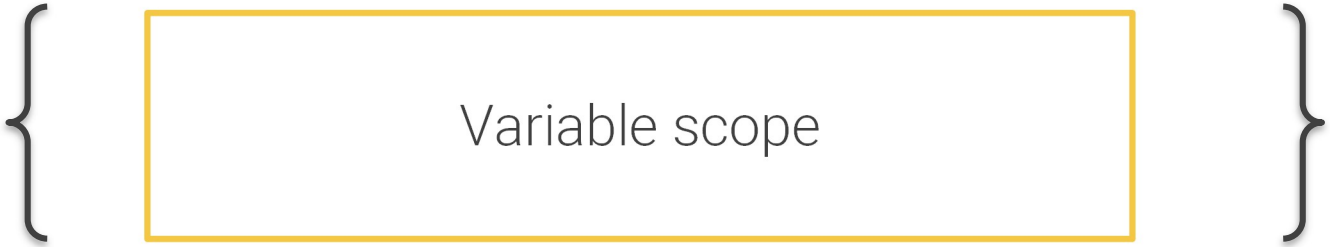
```
public void calculadoraPesoIdeal(int altura){
        double pesoIdealHombre = (altura-100)-((altura-100-52)*0.2);
        double pesoIdealMujer = (altura-100)-((altura-100-52)*0.4);
        System.out.println("Tu peso ideal si eres hombre es: "+pesoIdealHombre+"kg");
        System.out.println("Tu peso ideal si eres mujer es: "+pesoIdealMujer+"kg");
}
```

Calculadora peso ideal

```
public void calculadoraPesoIdeal(int altura){
        double pesoIdealHombre = (altura-100)-((altura-100-52)*0.2);
        double pesoIdealMujer = (altura-100)-((altura-100-52)*0.4);
        System.out.println("Tu peso ideal si eres hombre es: "+pesoIdealHombre+"kg");
        System.out.println("Tu peso ideal si eres mujer es: "+pesoIdealMujer+"kg");
}
```

Local variables

1. Parameters and local variables



A set of curly braces defines a variable scope

Calculadora peso ideal

```
public void calculadoraPesoIdeal(int altura){
        double pesoIdealHombre = (altura-100)-((altura-100-52)*0.2);
        double pesoIdealMujer = (altura-100)-((altura-100-52)*0.4);
        System.out.println("Tu peso ideal si eres hombre es: "+pesoIdealHombre+"kg");
        System.out.println("Tu peso ideal si eres mujer es: "+pesoIdealMujer+"kg");
}
```

1. Parameters and local variables

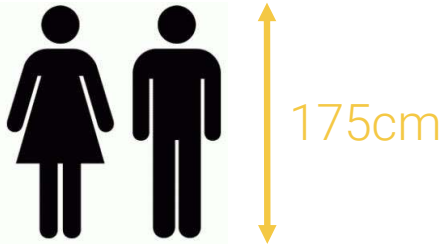
```
public void method(int altura){

        int altura= 10;
        ...
}
```

Error compilation
Method parameter and local variable can't be defined using the same name in a method

Calculadora peso ideal

1. Parameters and local variables

```
calculadoraPesoIdeal(175);
```



Method calling

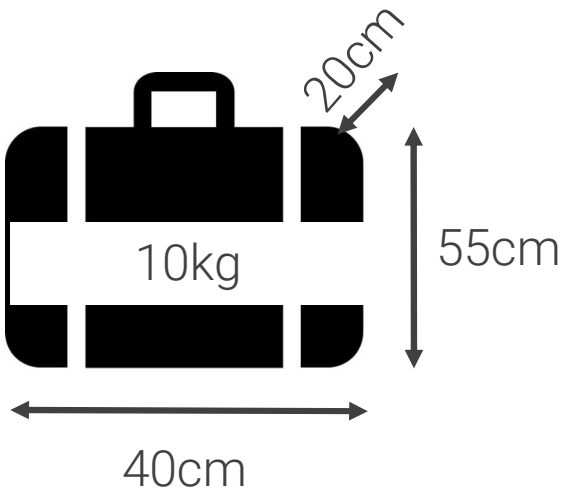
Print output

```
Tu peso ideal si eres hombre es: 70.4 kg
Tu peso ideal si eres mujer es: 65.8 kg
```

Multiple parameters

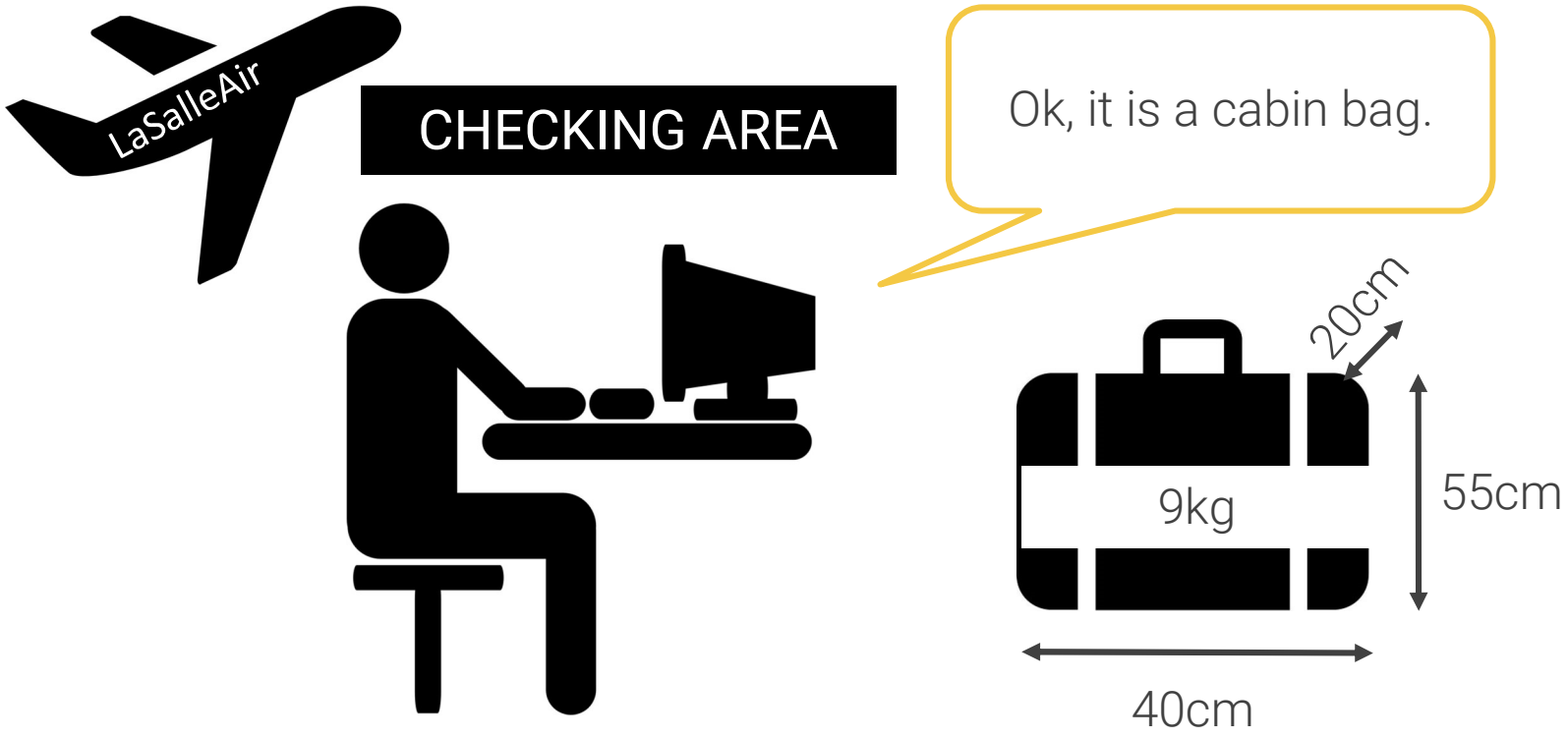
What cabin baggage can I carry?

What cabin baggage can I carry?



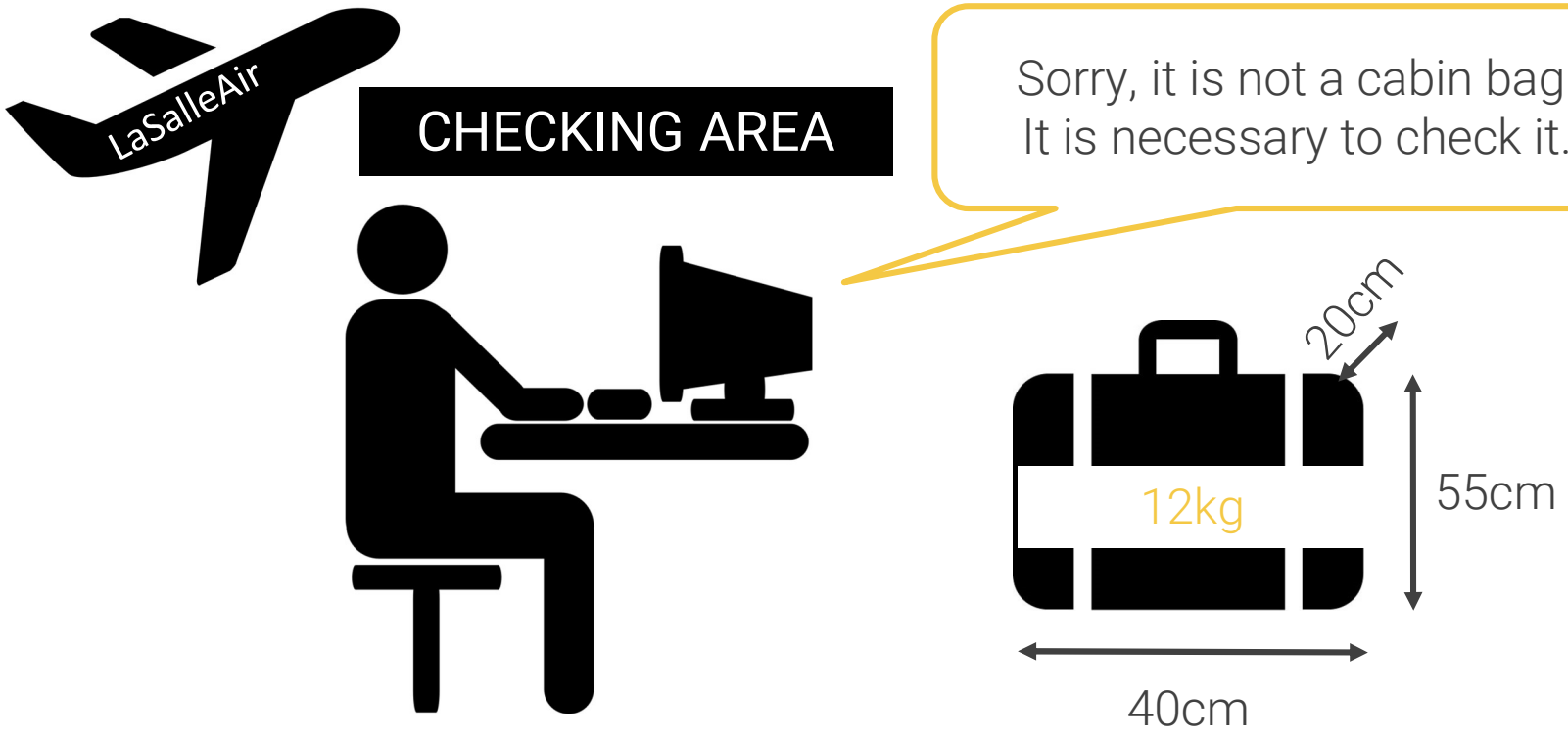
2. Multiple parameters

What cabin baggage can I carry?



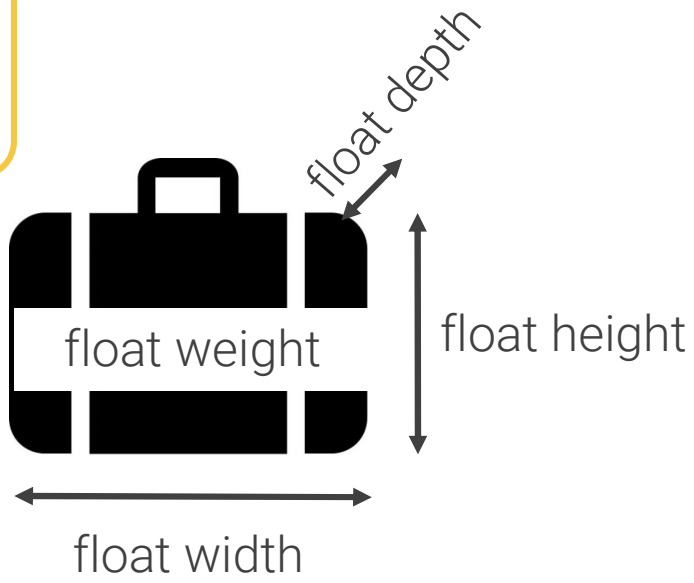
2. Multiple parameters

What cabin baggage can I carry?



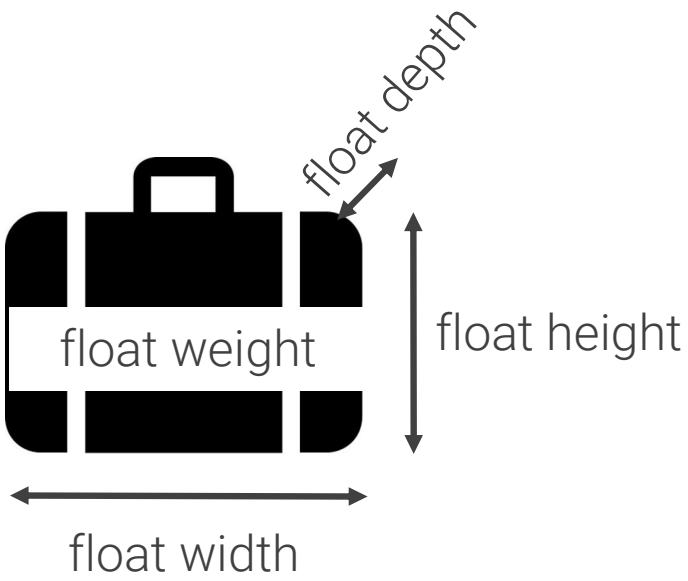
checkingCabinBag method

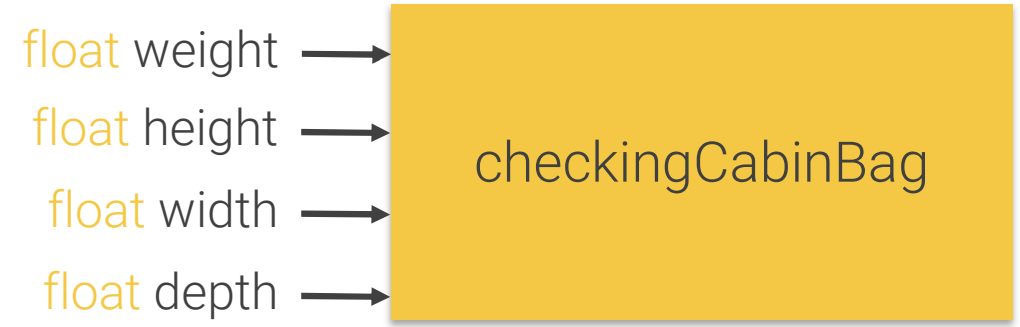
Method parameters



2. Multiple parameters

checkingCabinBag method





2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

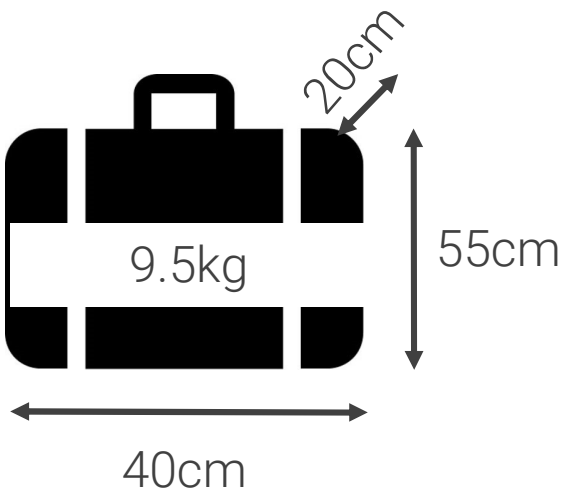
```
public void checkingCabinBag(..., float depth, boolean priority){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

```
checkingCabinBag(9.5,55,40,20);
```



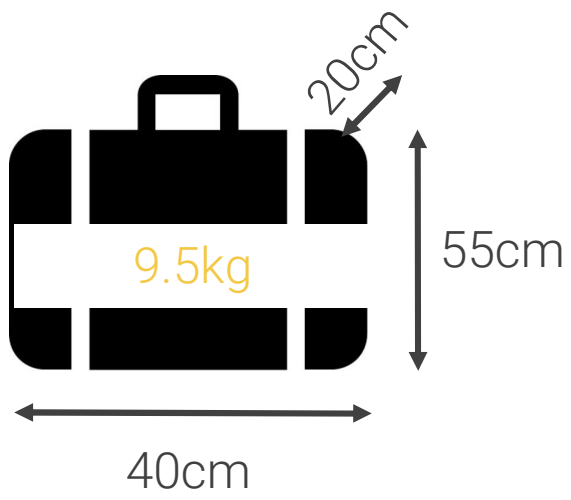
Method calling

```
public void checkingCabinBag(float weight, float height,
float width, float depth){
  //block of code
}
```

Method definition

2. Multiple parameters

```
checkingCabinBag(9.5,55,40,20);
```



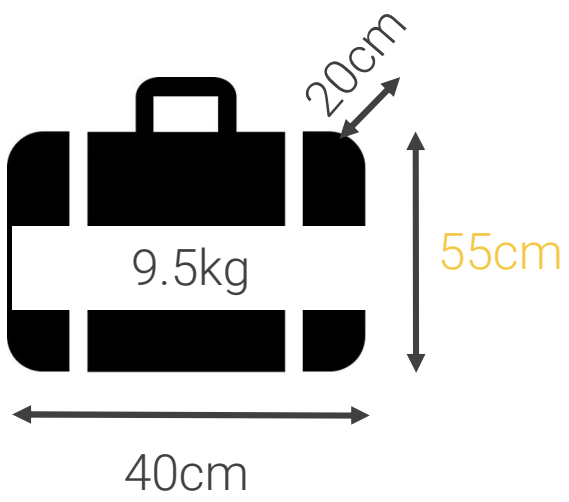
Method calling

```
public void checkingCabinBag(float weight, float height,
float width, float depth){
  //block of code
}
```

Method definition

2. Multiple parameters

```
checkingCabinBag(9.5,55,40,20);
```



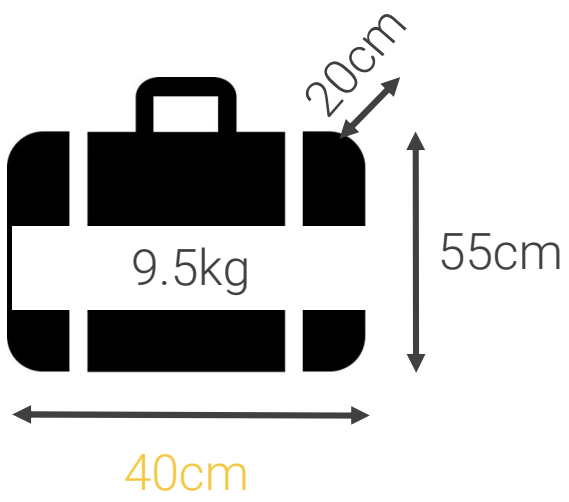
Method calling

```
public void checkingCabinBag(float weight, float height,
float width, float depth){
  //block of code
}
```

Method definition

2. Multiple parameters

```
checkingCabinBag(9.5,55,40,20);
```



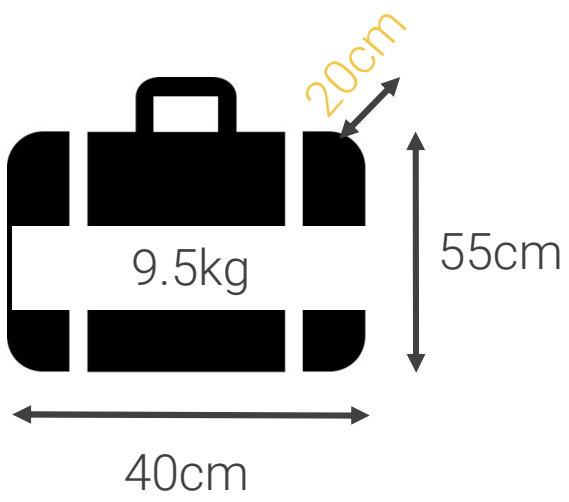
Method calling

```
public void checkingCabinBag(float weight, float height,
float width, float depth){
  //block of code
}
```

Method definition

2. Multiple parameters

```
checkingCabinBag(9.5,55,40,20);
```



Method calling

```
public void checkingCabinBag(float weight, float height,
float width, float depth){
  //block of code
}
```

Method definition

2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

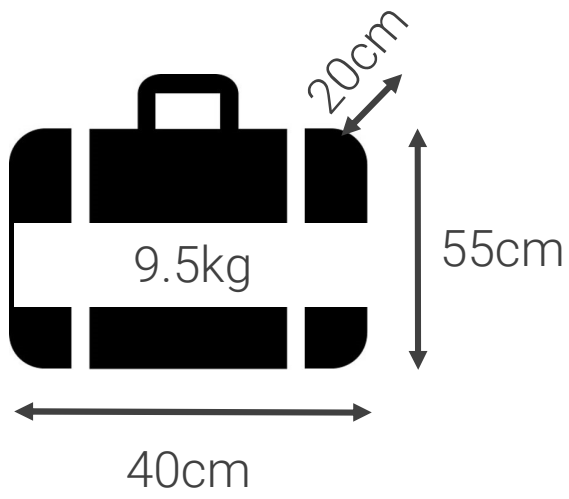
```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

2. Multiple parameters

checkingCabinBag(9.5,55,40,20);



Method calling

Print output

Ok, it is a cabin bag.

2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

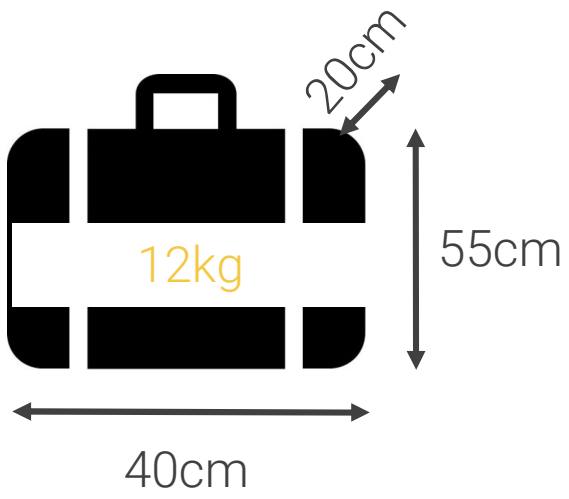
true

```
checkingCabinBag(9.5,55,40,20);
```

Method calling

2. Multiple parameters

checkingCabinBag(12,55,40,20);



Method calling

Print output

Sorry, it is not a cabin bag.
It is necessary to check it.

2. Multiple parameters

```
public void checkingCabinBag(float weight, float height, float width, float depth){
 final float MAX_WEIGHT = 10.0f; //kg
 final float MAX_HEIGHT = 55.0f; //cm
 final float MAX_WIDTH = 40.0f; //cm
 final float MAX_DEPTH = 20.0f; //cm
 boolean isCabinBag=weight<=MAX_WEIGHT && height<=MAX_HEIGHT && width<=MAX_WIDTH && depth<=MAX_DEPTH;
 if (isCabinBag){
   System.out.println("Ok, it is a cabin bag.");
 }else{
   System.out.println("Sorry, it is not a cabin bag.");
   System.out.println("It is necessary to check it.");
  }
}
```

false

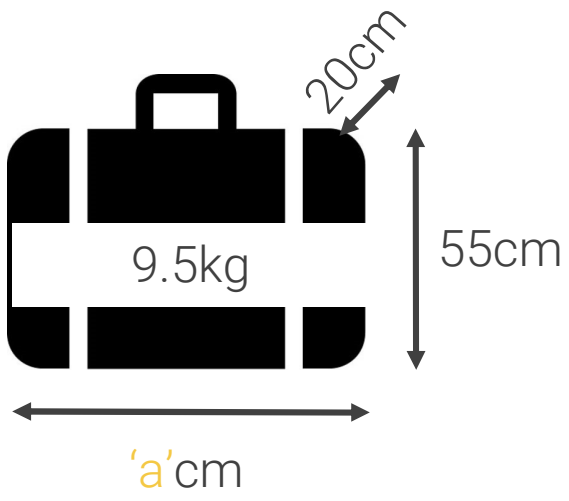
```
checkingCabinBag(12,55,40,20);
```

Method calling

2. Multiple parameters

Arguments type and order are important

~~checkingCabinBag(9.5,55,'a',20);~~



Method calling

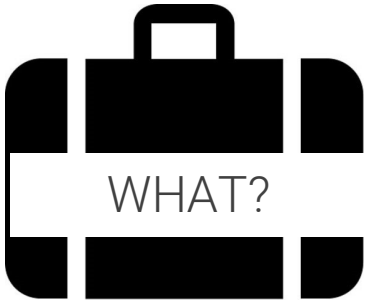
```
public void checkingCabinBag(float weight, float height,
float width, float depth){
  //block of code
}
```

Method definition

2. Multiple parameters

Arguments type and order are important

```
checkingCabinBag(55,20,40,9.5);
```



Method calling

```
public void checkingCabinBag(float weight, float height,
float width, float depth){
  //block of code
}
```

Method definition

“Cuando hay una tormenta los pájaros se esconden, pero las águilas vuelan más alto.“

Mahatma Gandhi, abogado, político y pensador indio