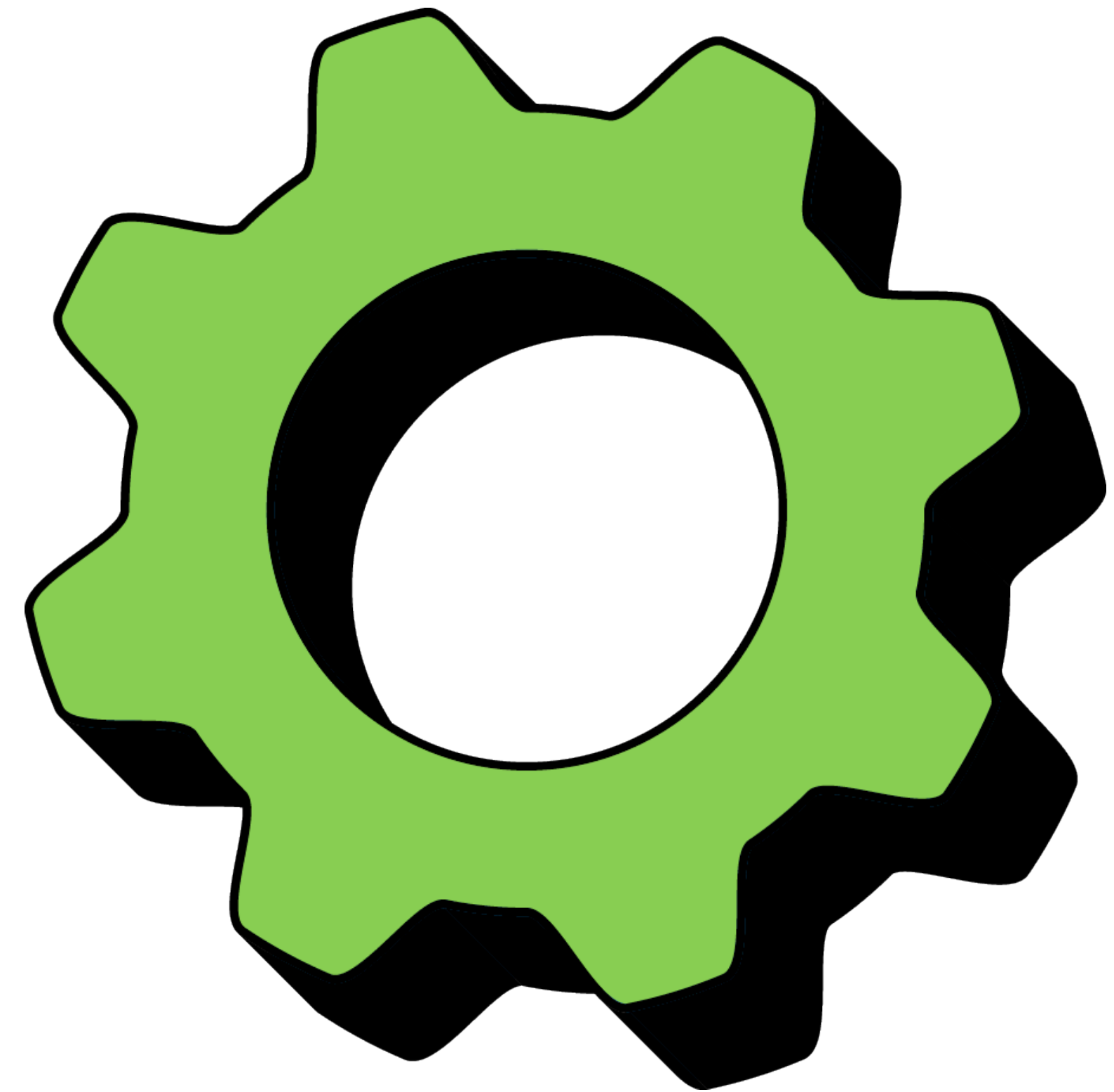


Essential Computing 1

# Methods with arguments



# Example

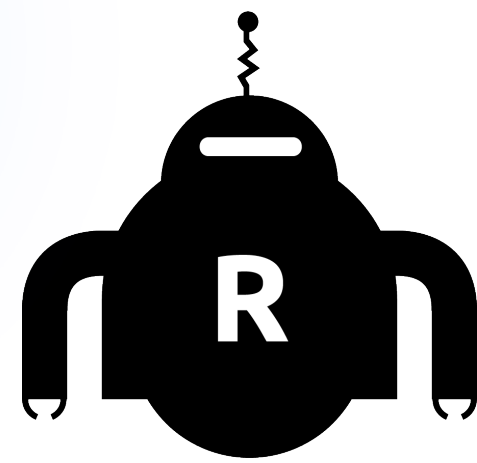
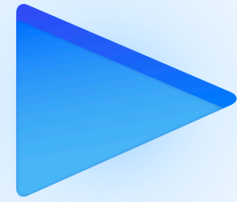
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", storedChance + 0.1 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

```
public static void main( String[] args ){
    double storedChance = 0.5;
    maybeSay( "Hello", storedChance + 0.1 );
}
```

<b>static modifier</b>	<b>return type</b>	<b>name</b>	<b>arg. 1 type</b>	<b>arg. 1 name</b>	<b>arg. 2 type</b>	<b>arg. 2 name</b>
static	void	maybeSay	String	prose	double	chance

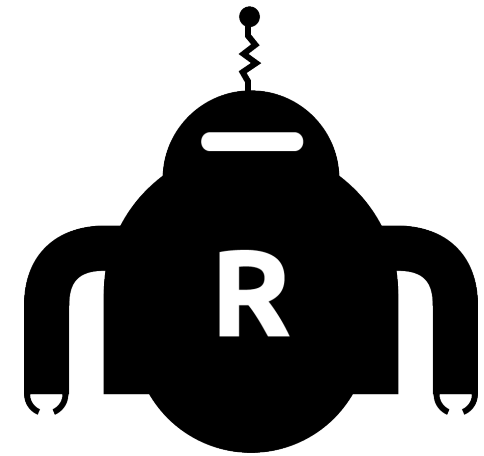
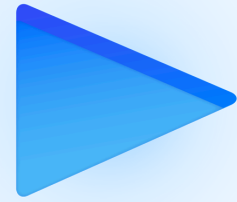
```
{
    boolean doSay = Math.random() < chance;
    if( doSay ){
        System.out.println( prose );
    }
}
```



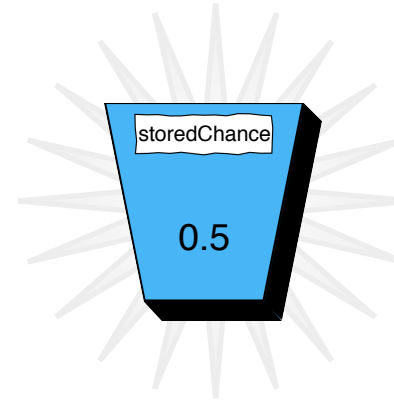
starting at  
main method

```
.....▶ public static void main( String[] args ){  
        double storedChance = 0.5;  
        maybeSay( "Hello", storedChance + 0.1 );  
    }
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

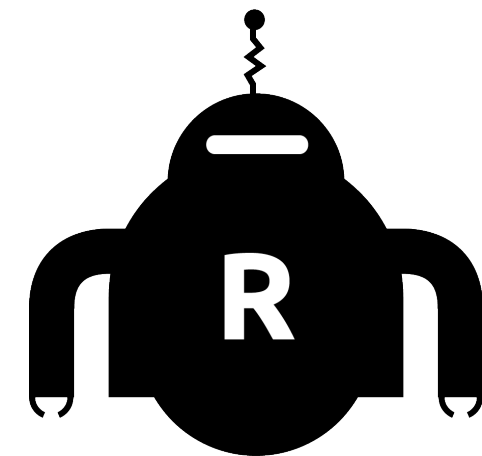
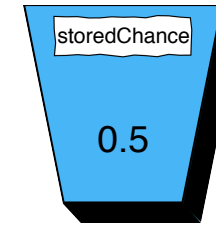
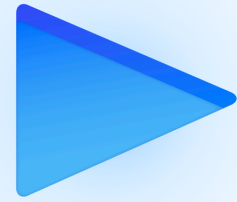


creating variable and  
assigning 0.5 to it.



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", storedChance + 0.1 );  
}
```

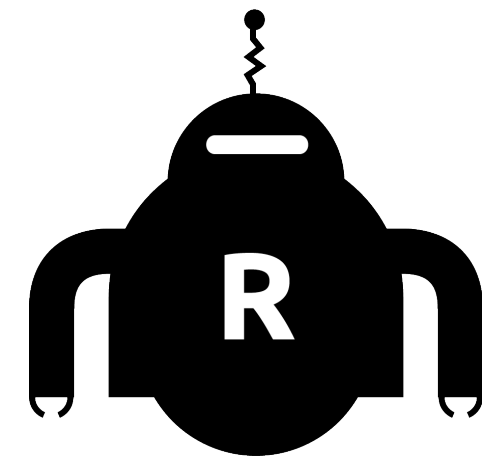
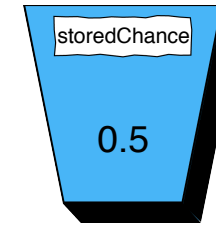
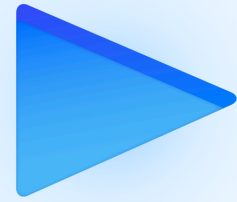
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", storedChance + 0.1 );  
}
```

evaluating arguments

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

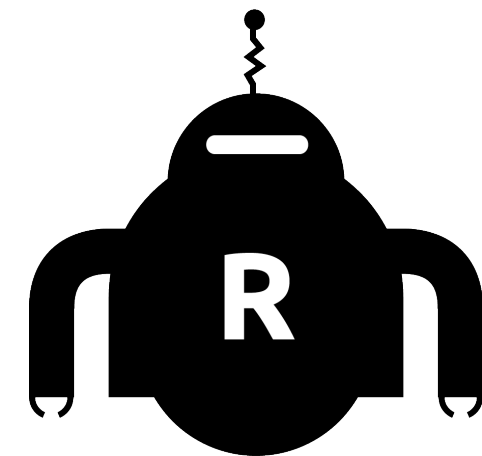
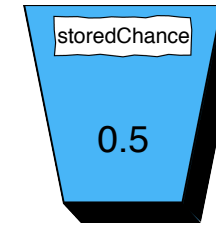
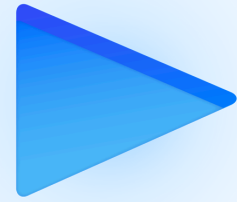


inserting value  
of variable

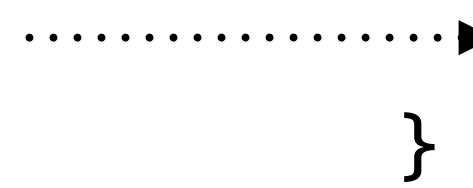
.....▶

```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", storedChance + 0.1 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



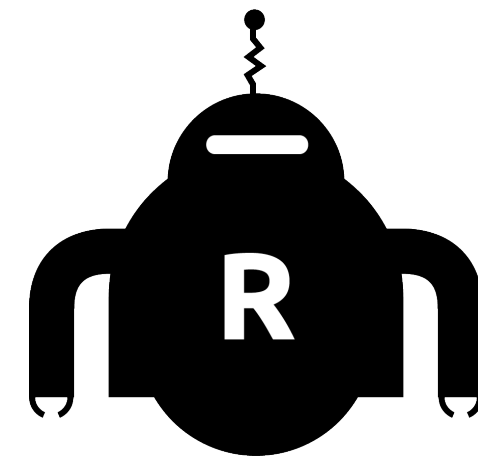
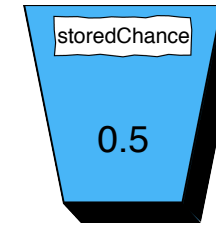
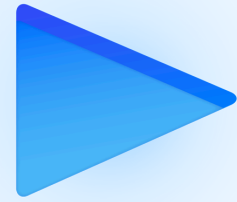
adding



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", 0.5 + 0.1 );  
}
```

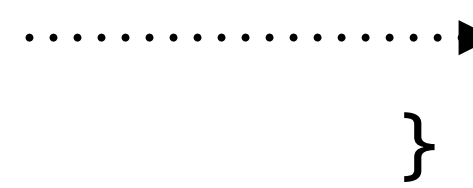
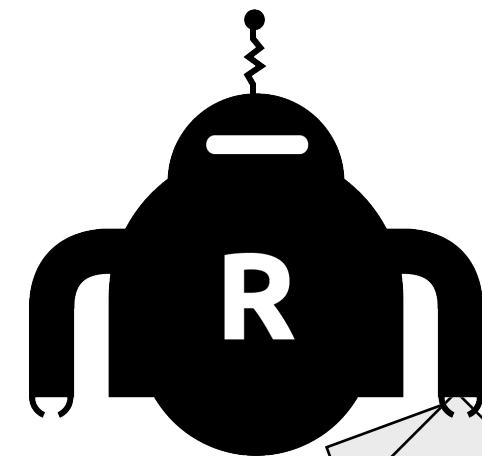
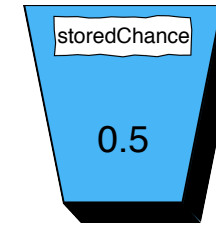
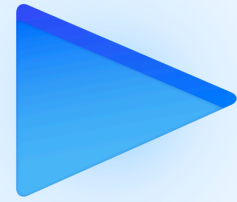
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



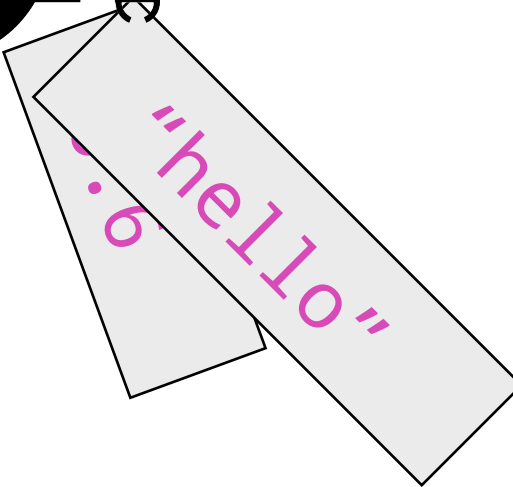


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", 0.6 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

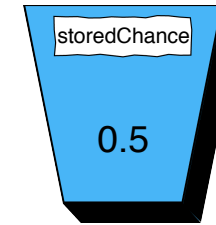
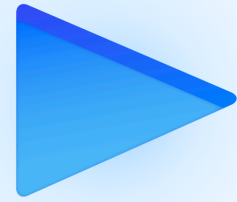


picking up arguments



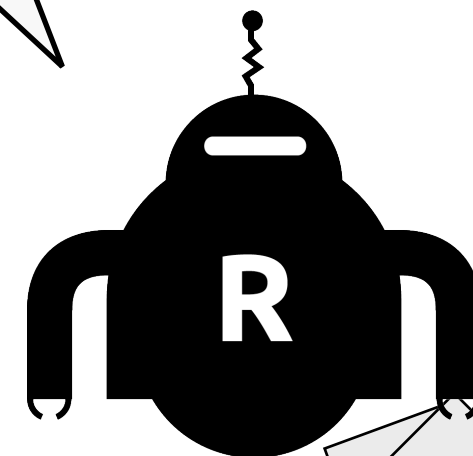
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", 0.6 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

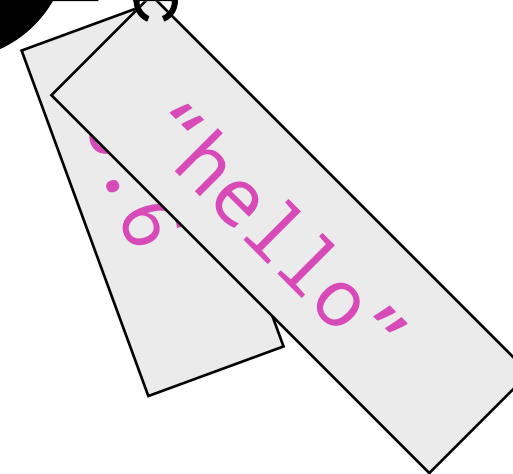


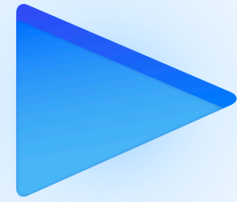
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

calling method

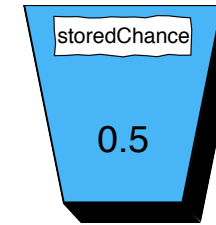
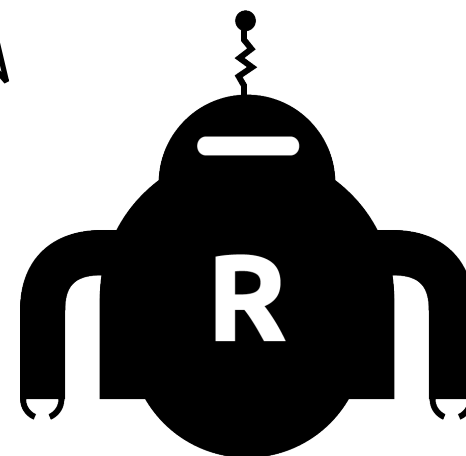


```
.....▶ static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

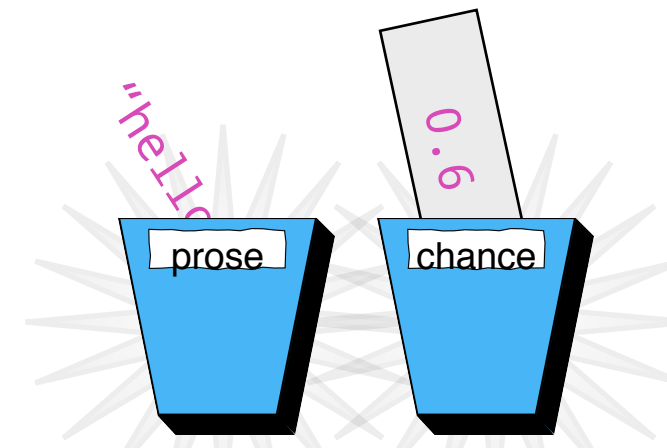




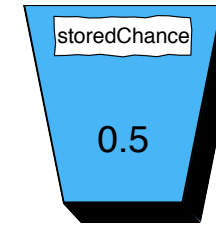
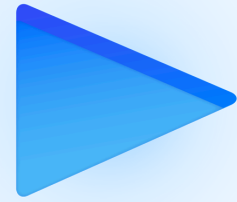
creating argument  
variables and assigning  
input values



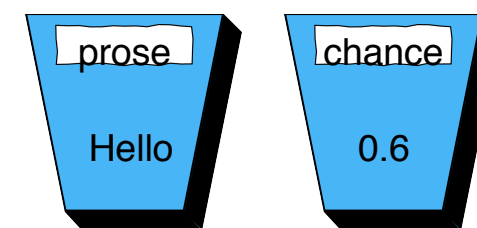
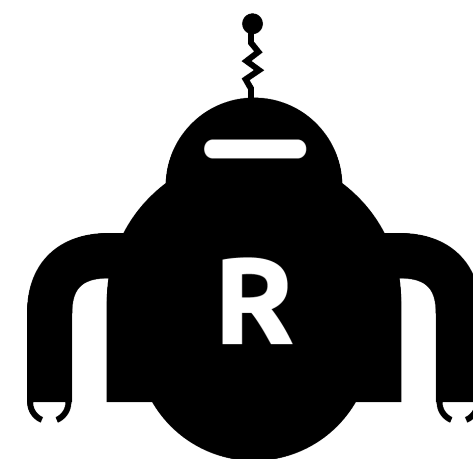
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



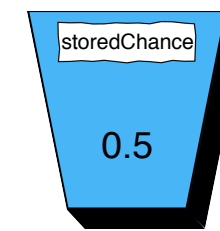
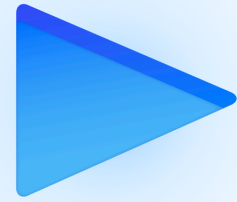
```
.....▶ static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

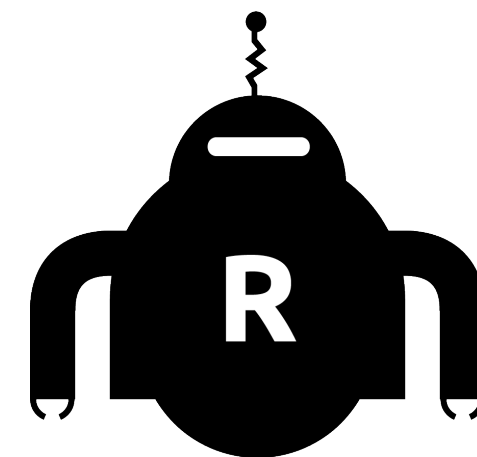
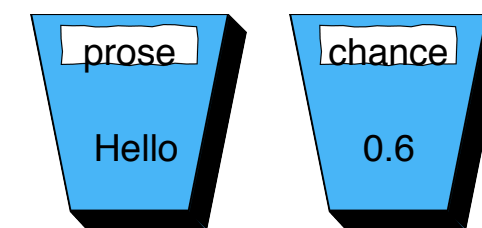


```
.....▶ static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

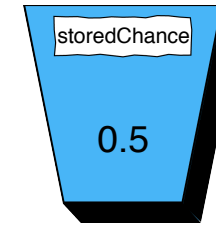
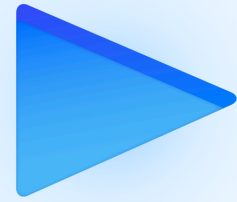


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

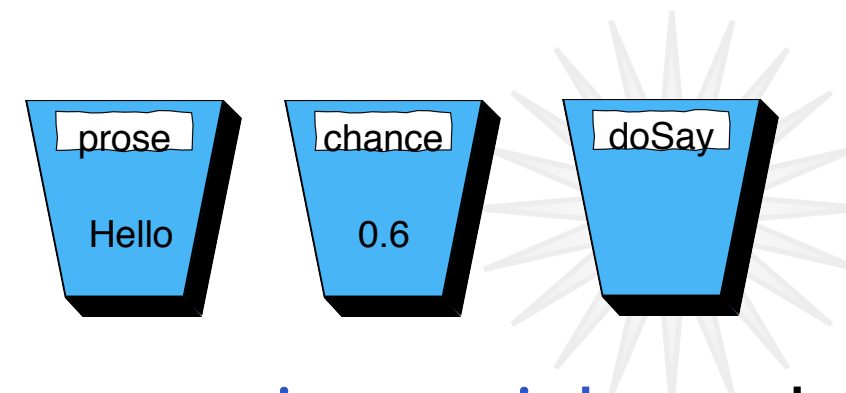
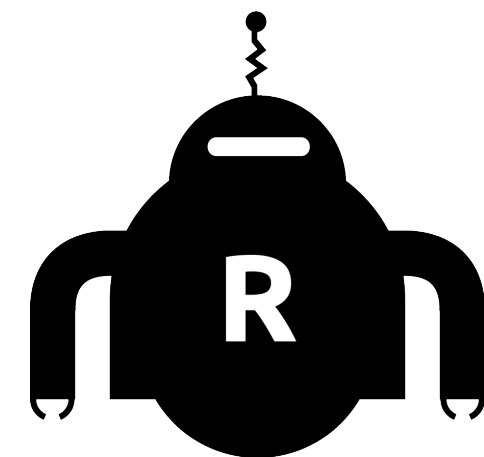
creating variable



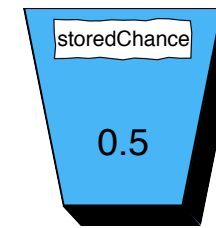
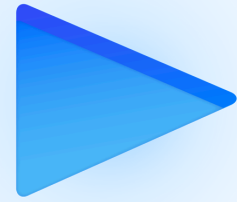
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



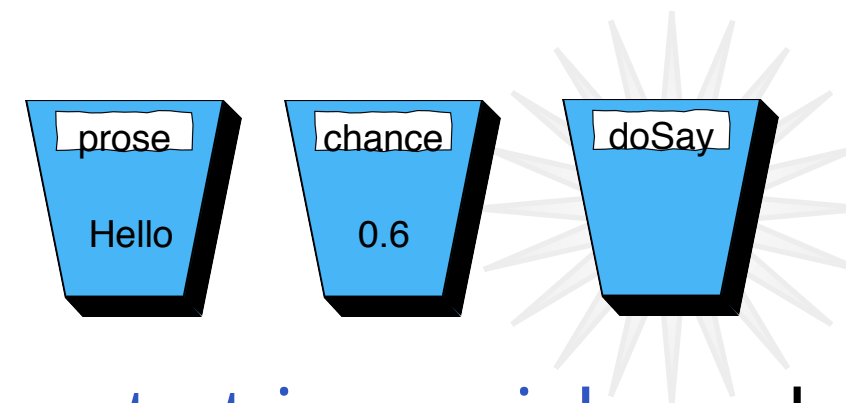
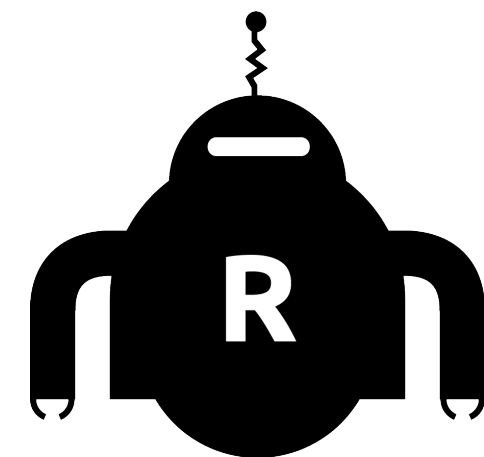
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

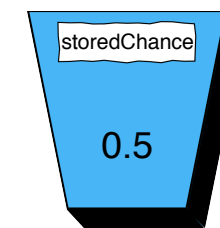
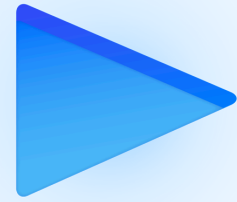


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



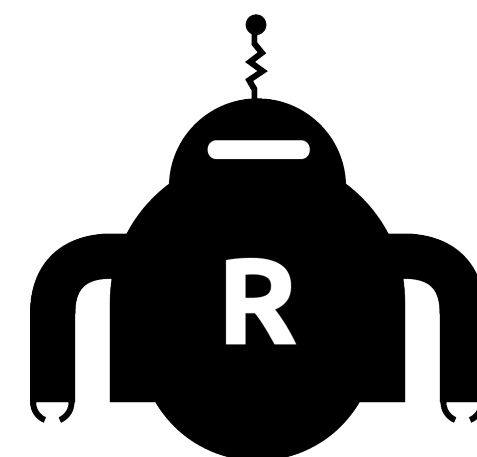
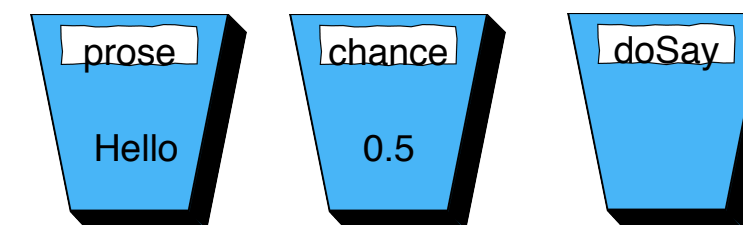
```
static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



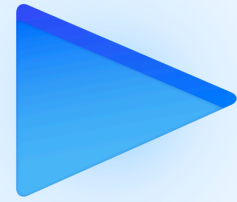


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

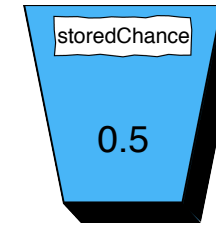
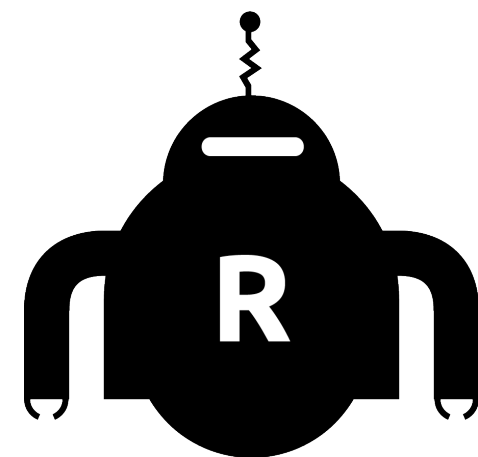
calling the random method  
inside the Math class



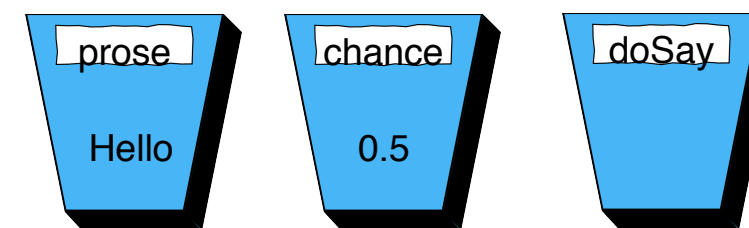
```
static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



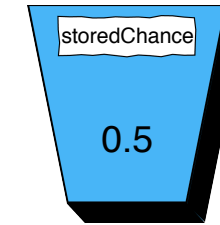
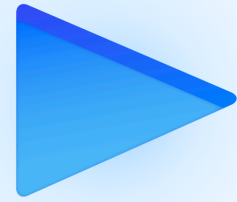
a random value between 0.0  
and 1.0 is returned



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

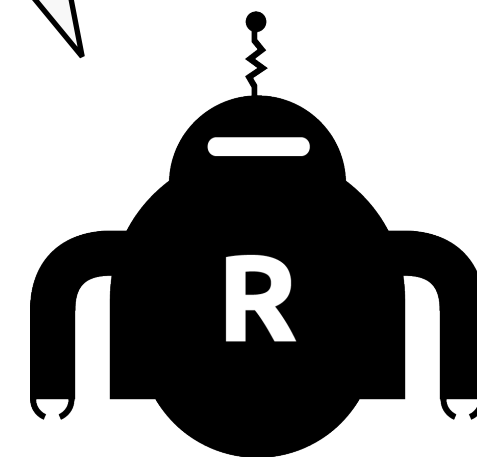
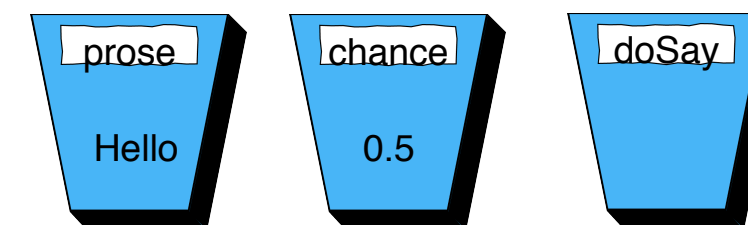


```
static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = 0.213974619387461 < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

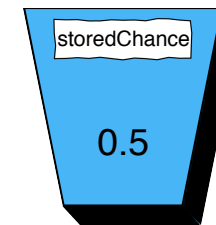
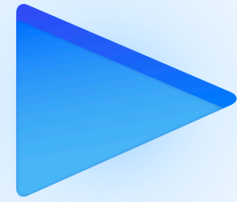


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

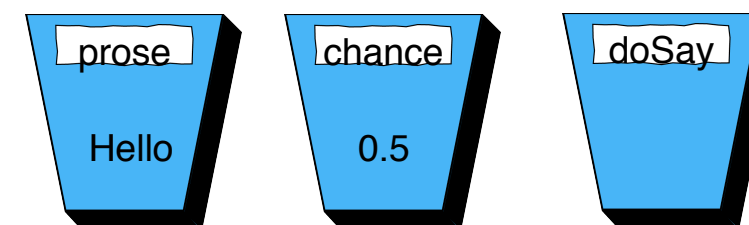
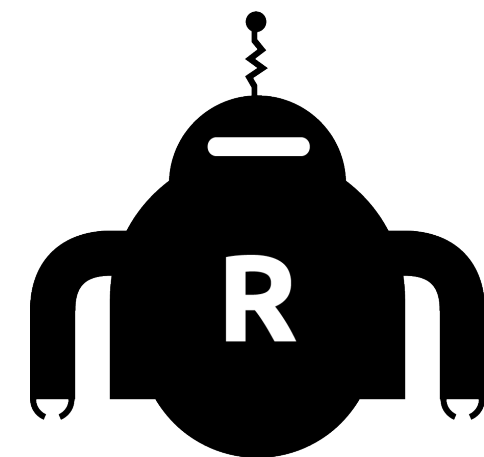
inserting value  
of variable



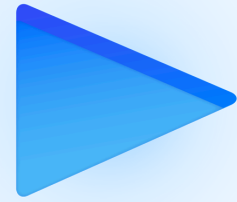
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static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = 0.213974619387461 < chance  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



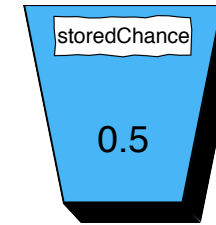
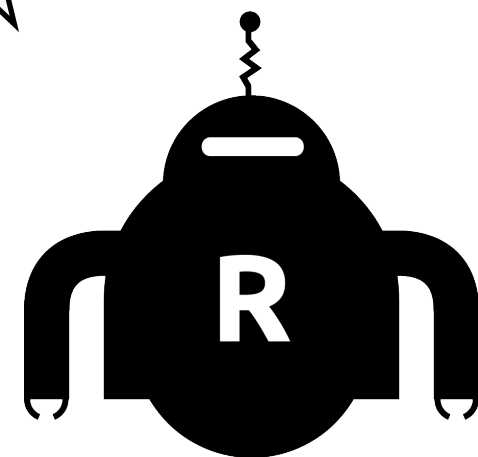
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



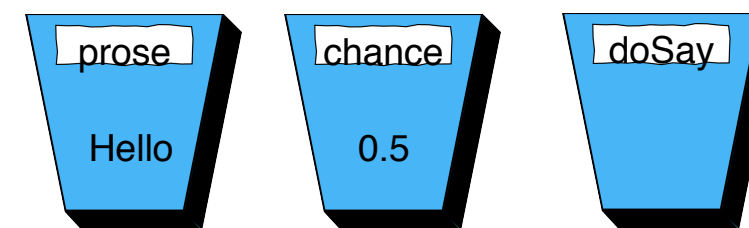
```
static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = 0.213974619387461 < 0.6  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



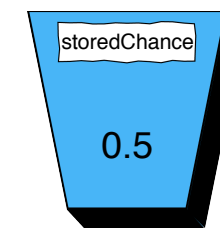
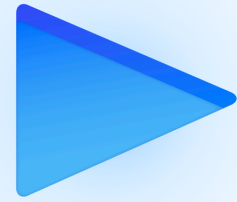
evaluating  
relational operator



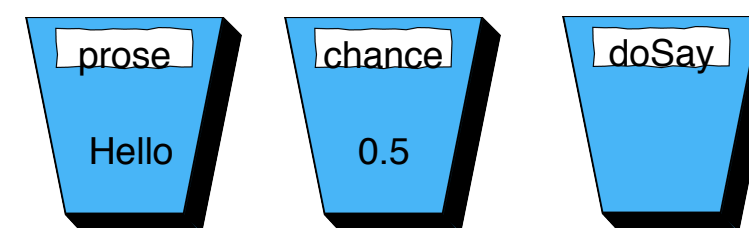
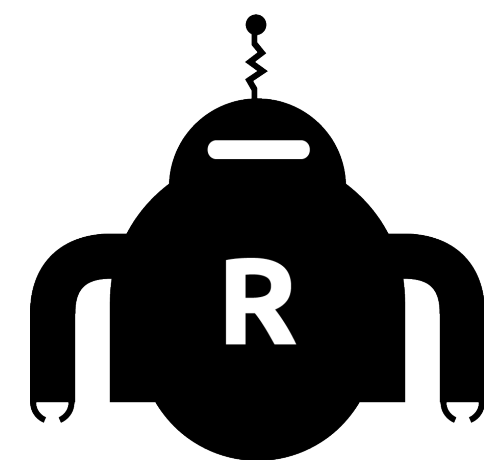
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



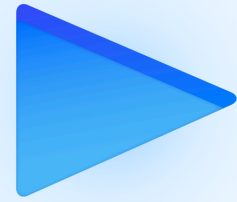
```
static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = 0.213974619387461 < 0.6;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



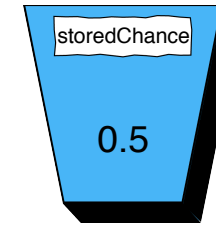
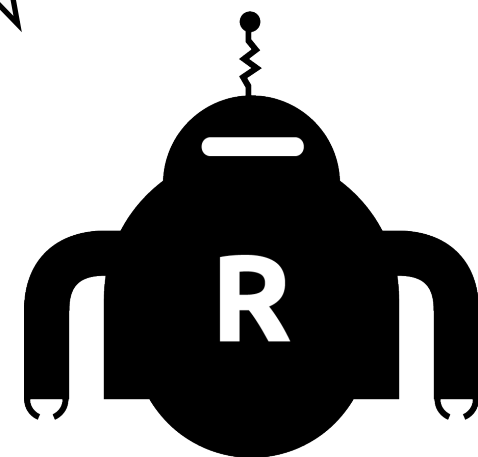
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



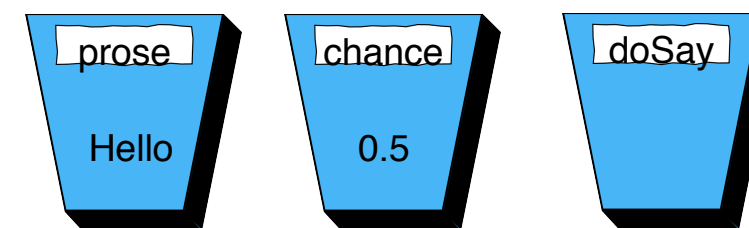
```
static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = true;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



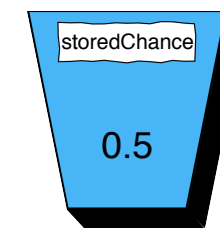
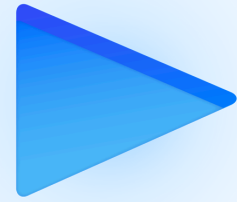
assigning to  
variable



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

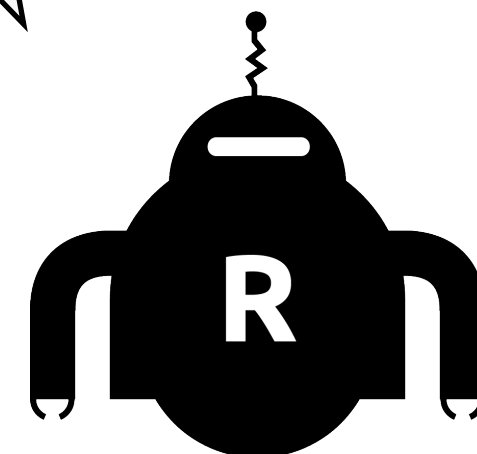
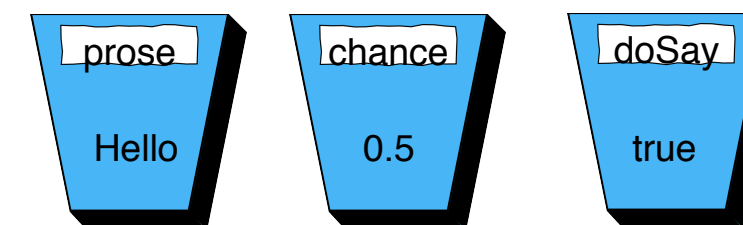


```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



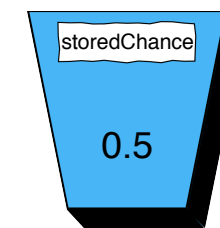
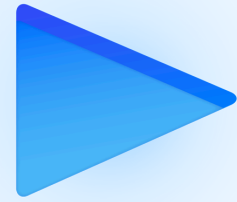
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

assigning to  
variable



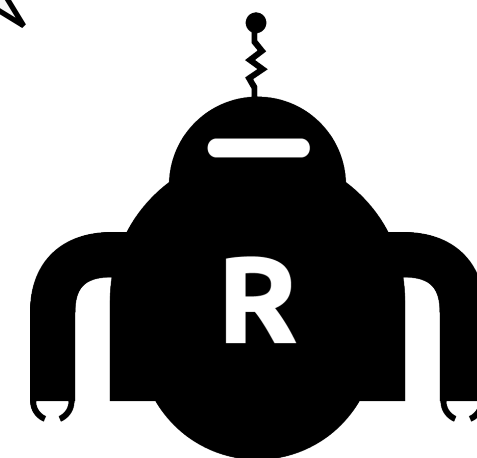
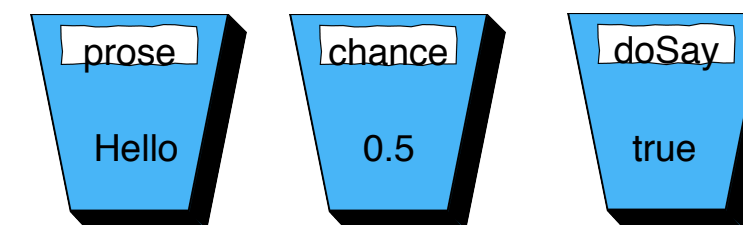
```
static void maybeSay( String prose, double chance ){  
    .....▶ boolean doSay = true;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



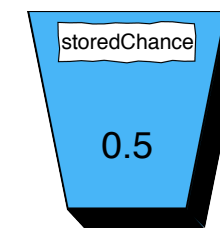
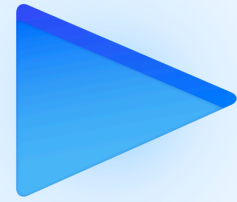


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

inserting value from  
variable

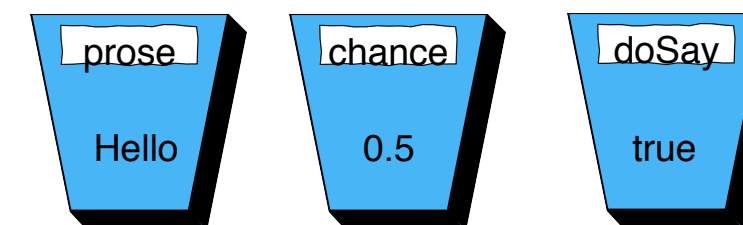


```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    .....▶ if( doSay ){  
        System.out.println( prose );  
    }  
}
```

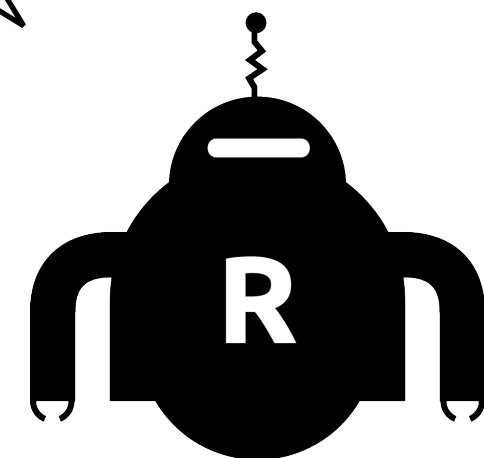


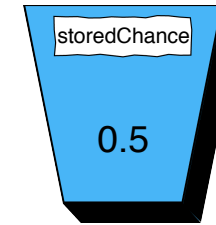
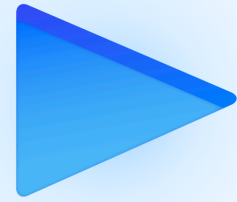
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

evaluating conditional  
statement



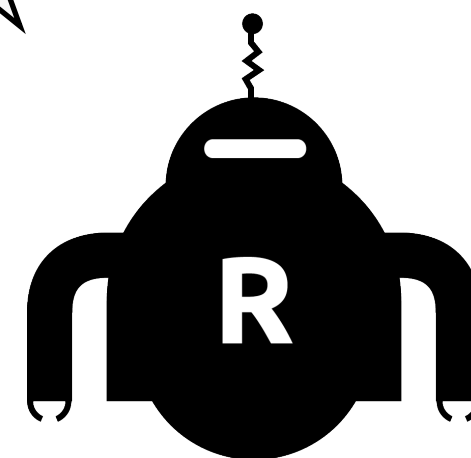
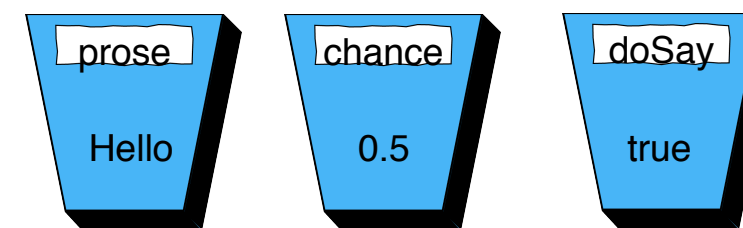
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( true ){  
        System.out.println( prose );  
    }  
}
```



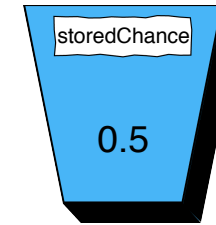
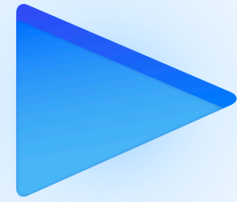


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

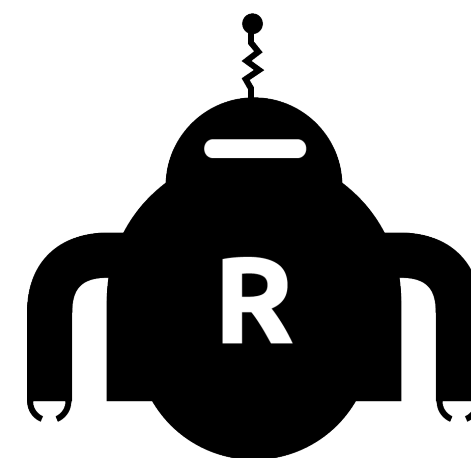
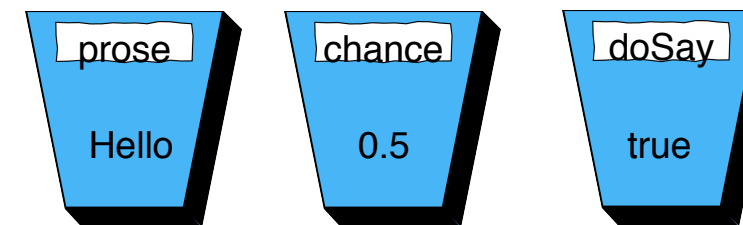
inserting value  
from variable



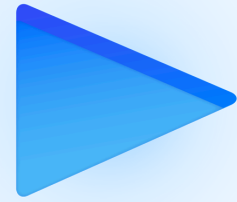
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( true ){  
        .....▶ System.out.println( prose );  
    }  
}
```



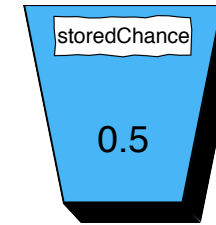
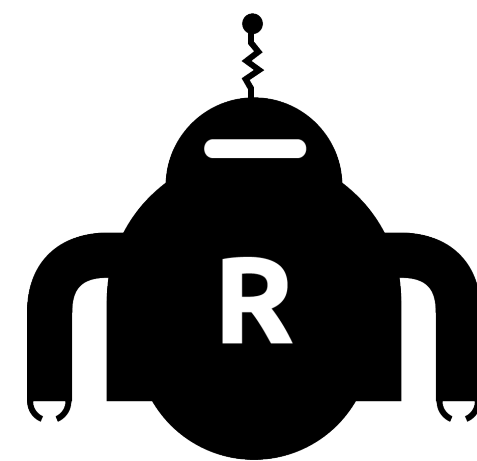
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



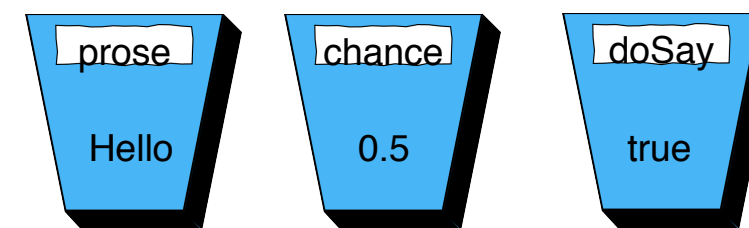
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( true ){  
        .....▶ System.out.println( "Hello" );  
    }  
}
```



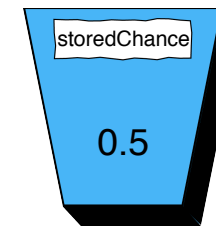
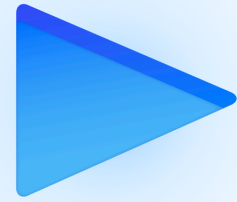
calling the println  
method, inside the out  
object, inside the  
System class.



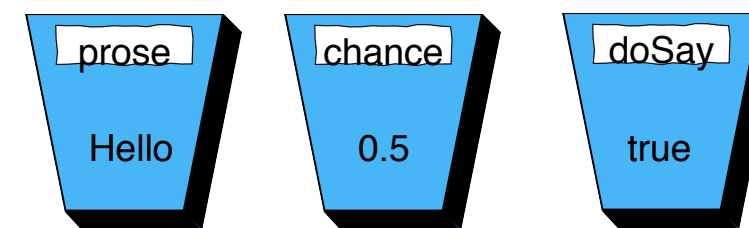
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



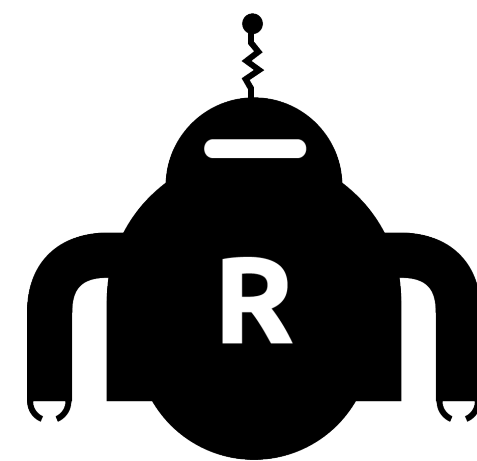
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( true ){  
        System.out.println( "Hello" );  
    }  
}
```



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

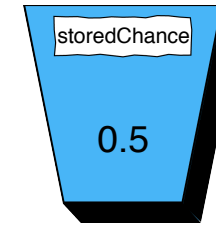
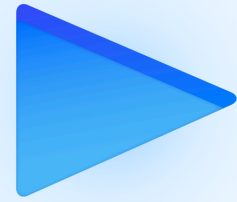


```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( true ){  
        .....▶ System.out.println( "Hello" );  
    }  
}
```

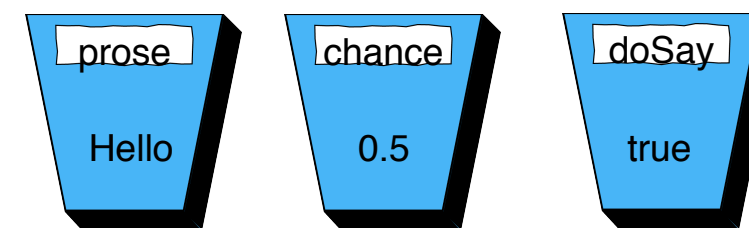


Console

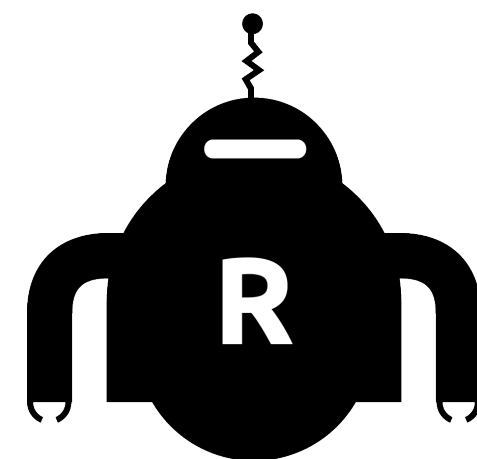
Hello



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

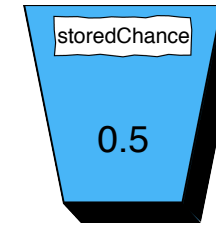
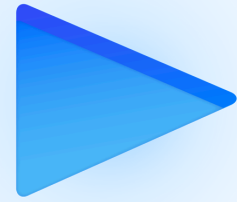


```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( true ){  
        System.out.println( "Hello" );  
    }  
}
```

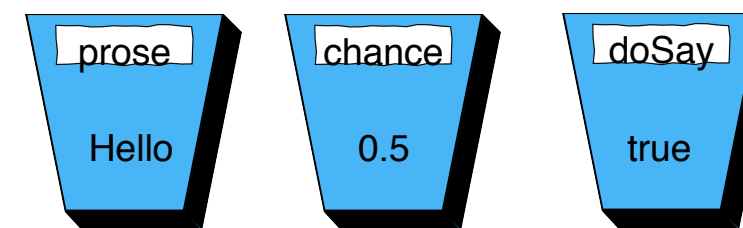


Console

Hello

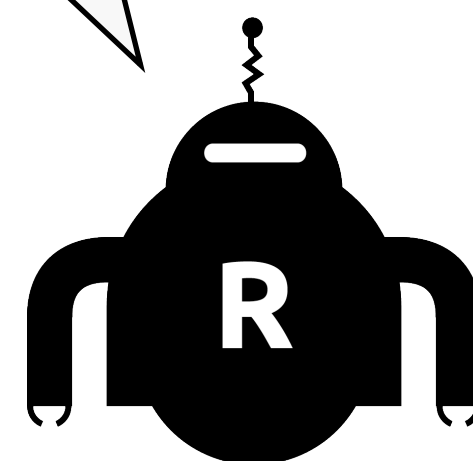


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```



```
static void maybeSay( String prose, double chance ){  
    boolean doSay = true;  
    if( true ){  
        System.out.println( "Hello" );  
    }  
}
```

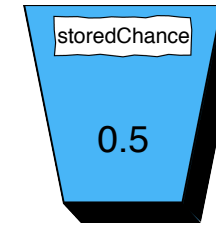
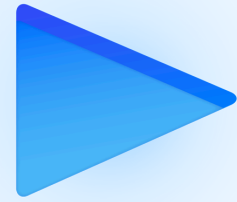
forgetting  
local variables



Console

Hello

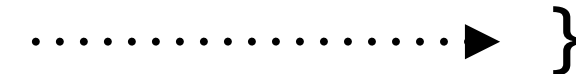
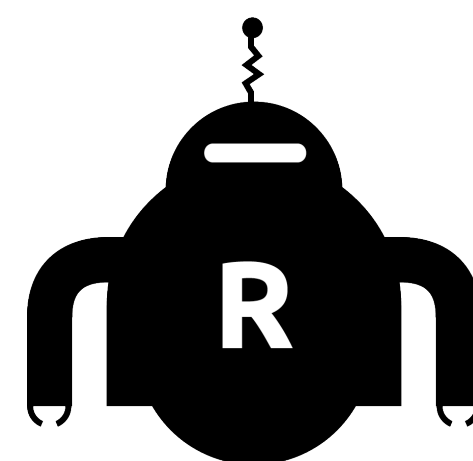




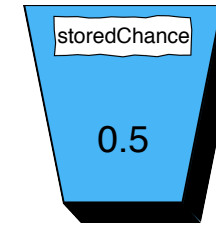
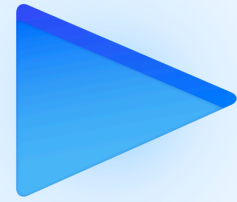
```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

Console

Hello

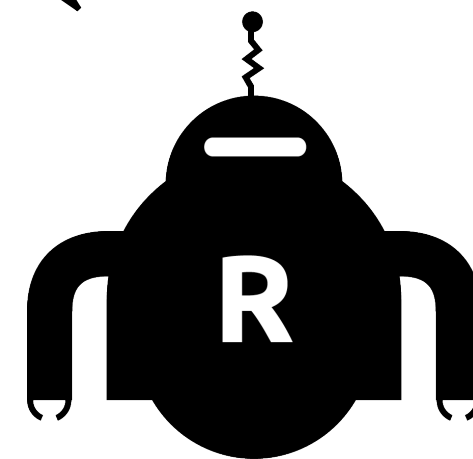


```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    ● maybeSay( "Hello", 0.6 );  
}
```

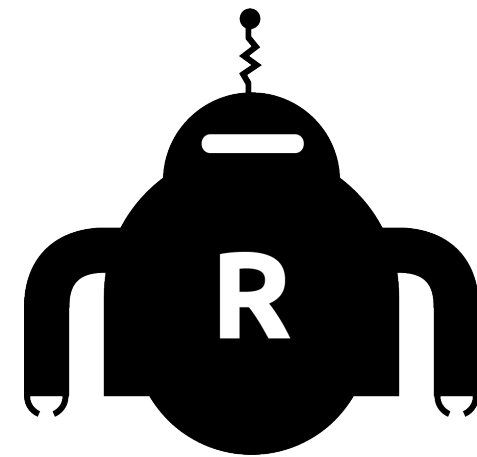
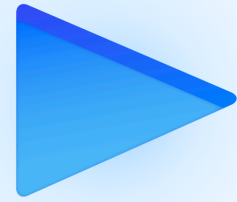
going back the  
call stack



Console

Hello

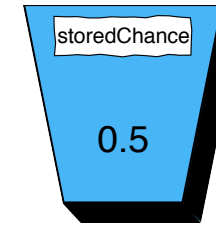
```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```



forgetting local  
variables

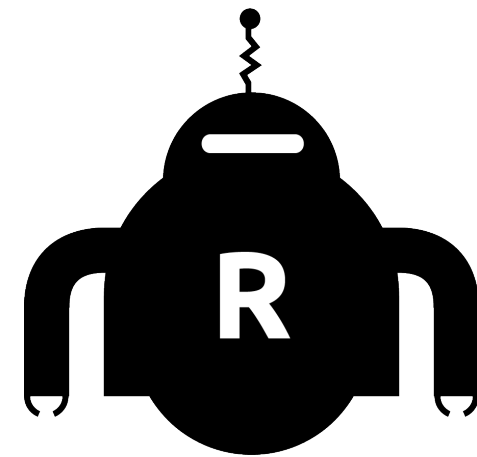
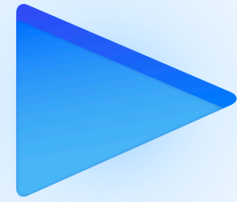
Console

Hello



```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", 0.6 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

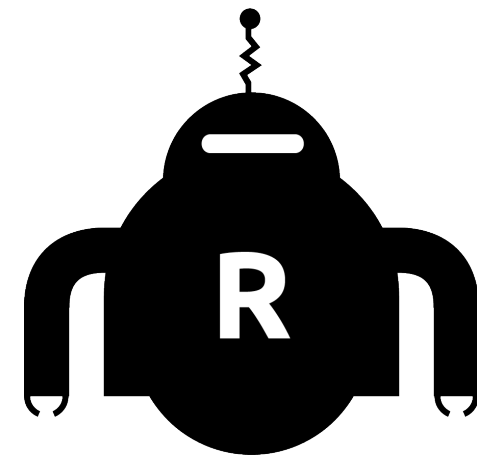
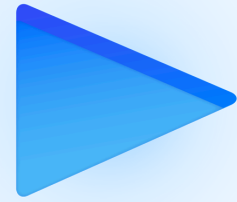


```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", storedChance + 0.1 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

Console

Hello



end of program

Console

Hello

```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", storedChance + 0.1 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```

Console

Hello

```
public static void main( String[] args ){  
    double storedChance = 0.5;  
    maybeSay( "Hello", storedChance + 0.1 );  
}
```

```
static void maybeSay( String prose, double chance ){  
    boolean doSay = Math.random() < chance;  
    if( doSay ){  
        System.out.println( prose );  
    }  
}
```