Gyakorlat

1) Fibonacci

```
  public class Fibonacci {

     public static void main(String[] args) {
          int a=1;
          int b=1;
          for(int i=0; i<20;i++)
          {
               System.out.println(b);
               int temp=a+b;
               b=a;
               a=temp;
          }
     }

  }
```

2) Random

```
  import java.io.BufferedReader;
  import java.io.InputStreamReader;
  import java.util.Random;

  public class Main {

     public static void main(String[] args) {
          Random a=new Random(System.currentTimeMillis());
          int b=a.nextInt(100);
          InputStreamReader isr=new InputStreamReader(System.in);
          BufferedReader br=new BufferedReader(isr);
          String s;
          boolean gameover=false;
          System.out.println("Találd ki melyik számra gondoltam!");
          try{
               while( gameover==false)
               {
                    s=br.readLine();
                    int temp=Integer.parseInt(s);
                    if(b<temp)
                         System.out.println("Kisebb");
                    else if(b>temp)
                         System.out.println("Nagyobb");
                    else
                    {
                         System.out.println("Kitaláltad!");
                         gameover=true;
                    }
               }
          }
          catch(Exception e)
          {
               e.printStackTrace();
          }
     }
}
```

3) Shakespeare

```
import java.io.*;
import java.util.*;
public class Main {

	public static void main(String[] args) {
		HashMap<String, Integer> szavak=new
HashMap<String,Integer>();
		try{
			FileReader fr=new FileReader("romeo.txt");
			BufferedReader br=new BufferedReader(fr);
			String s;
			while((s=br.readLine())!=null)
			{
				s=s.replaceAll("[^A-Za-z0-9 ]", "");
				String[] words=s.split(" ");
				for(String w: words)
					if(szavak.containsKey(w))
						szavak.put(w, szavak.get(w)+1);
					else
						szavak.put(w, 1);
			}
			System.out.println(szavak.get("love"));



		}
		catch(Exception e)
		{
			e.printStackTrace();
		}
	}

}
```

4) Filesys

```
import java.io.*;
import java.nio.file.FileAlreadyExistsException;
public class Main {
	public static void main(String[] args){
		File now=new File(System.getProperty("user.dir"));
		String separator=System.getProperty("file.separator");
		InputStreamReader isr=new InputStreamReader(System.in);
		BufferedReader br=new BufferedReader(isr);
		String s;
		try{
			while((s=br.readLine())!=null)
			{
				String[] commands=s.split(" ");
				switch(commands[0]){
				case "ls":
					File[] list=now.listFiles();
					for(int i=0;i<list.length;i++)
    System.out.println(list[i].getName());
                    break;
                case "cd":
                    if(commands.length<2)
                        throw new 
ArrayIndexOutOfBoundsException();
                    else if(commands[1]=="..")
                        now=now.getParentFile();
                    else
                    {
                        File temp = new File(now.getPath() + 
separator + commands[1]);
                        if(temp.exists())
                            now=temp;
                        else
                            throw new 
FileNotFoundException();
                    }
                    break;
                case "mkdir":
                    if(commands.length<2)
                        throw new 
ArrayIndexOutOfBoundsException();
                    else
                    {
                        File temp = new File(now.getPath() + 
separator + commands[1]);
                        if(temp.exists())
                            throw new 
FileAlreadyExistsException(temp.getName());
                        else
                            temp.mkdir();
                    }
                    break;
                case "exit":
                    System.exit(0);
                }
            }
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
    }
}
```