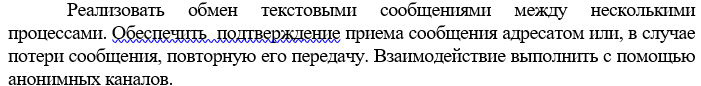
**Лабораторная работа № 6**

**Межпроцессное взаимодействие на примере анонимных каналов**

**Цель работы:** Изучение механизмов межпроцессного взаимодействия InterProcessCommunication (IPC) в ОС Windows.



namespace Lab6\_Server

{

class Program

{

static void Main(string[] args)

{

Process pipeClient = new Process();

pipeClient.StartInfo.FileName = @"D:\Studieren\Course3\SPO\lab6\Lab6\_Samusev\Lab6\Lab6\_Client\bin\Debug\netcoreapp3.0\Lab6\_Client.exe";

using (AnonymousPipeServerStream pipeServer =

new AnonymousPipeServerStream(PipeDirection.Out,

HandleInheritability.Inheritable))

{

using (var pipeServerIn =

new AnonymousPipeServerStream(PipeDirection.In, HandleInheritability.Inheritable))

{

try

{

pipeServer.ReadMode = PipeTransmissionMode.Message;

}

catch (NotSupportedException e)

{

}

pipeClient.StartInfo.Arguments =

pipeServer.GetClientHandleAsString() + " " + pipeServerIn.GetClientHandleAsString();

pipeClient.StartInfo.UseShellExecute = false;

pipeClient.Start();

pipeServer.DisposeLocalCopyOfClientHandle();

try

{

using (StreamWriter sw = new StreamWriter(pipeServer))

{

sw.AutoFlush = true;

while (true)

{

Console.WriteLine("Enter your message: ");

var message = Console.ReadLine();

sw.WriteLine(message);

Thread.Sleep(300);

}

}

}

catch (IOException e)

{

Console.WriteLine("[SERVER] Error: {0}", e.Message);

}

}

}

pipeClient.WaitForExit();

pipeClient.Close();

}

}

}

namespace Lab6\_Client

{

class Program

{

static void Main(string[] args)

{

{

if (args.Length > 0)

{

using (PipeStream pipeClient =

new AnonymousPipeClientStream(PipeDirection.In, args[0]))

{

using (var pipeClientOut = new AnonymousPipeClientStream(PipeDirection.Out, args[1]))

{

try

{

pipeClient.ReadMode = PipeTransmissionMode.Message;

}

catch (NotSupportedException e)

{

}

string temp;

using (StreamReader sr = new StreamReader(pipeClient))

{

while ((temp = sr.ReadLine()) != null)

{

Console.WriteLine("Клиент говорит: " + temp);

}

}

}

}

}

}

}

}

}

