

Atmel Studio

Atmel Studio 7

Easier to Use and
More Powerful than Ever



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Overview

Software

QTouch Tools

C/C++ Compiler/Editor

Debugging/Simulation

Videos

Atmel Studio 7

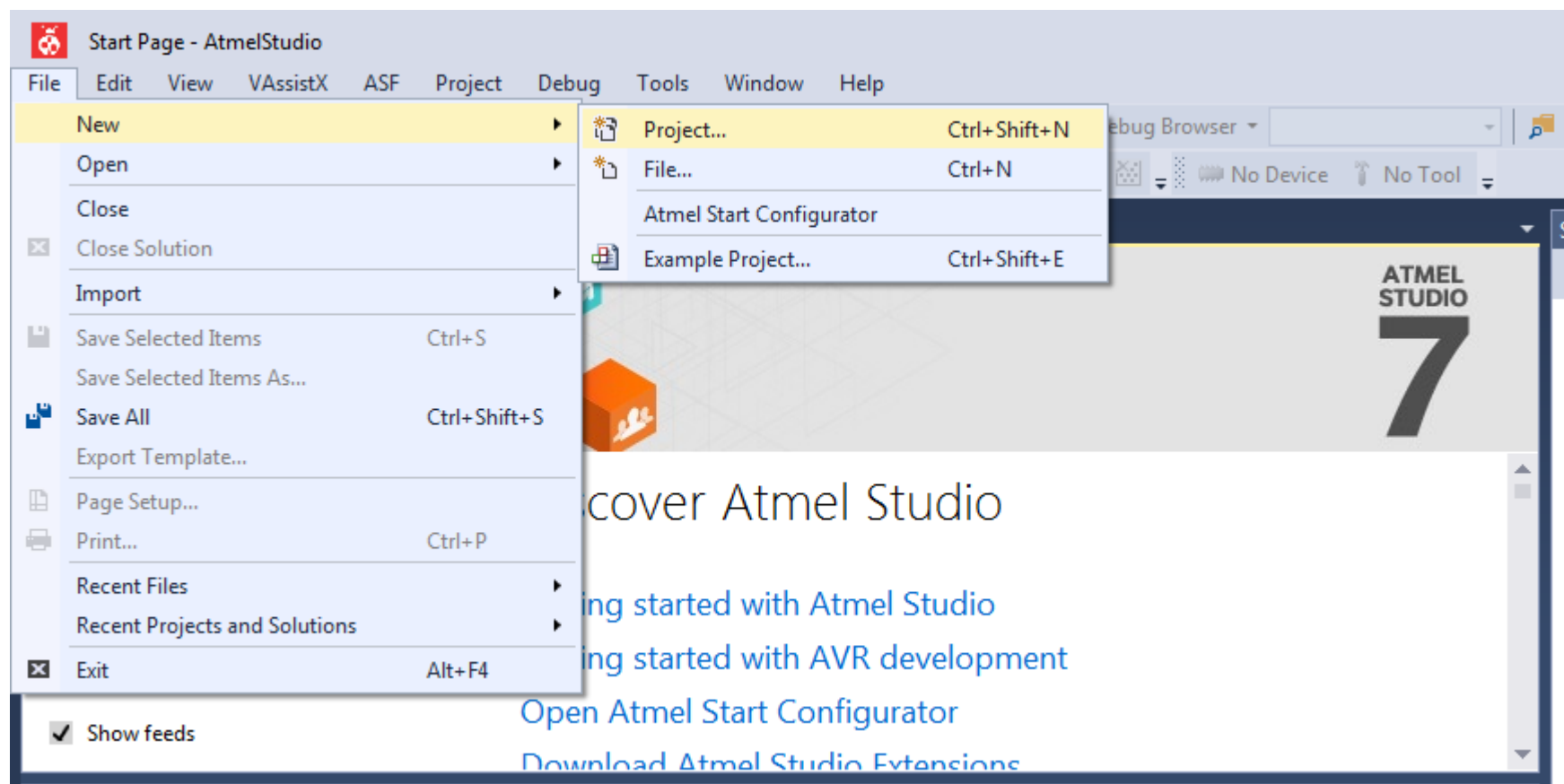
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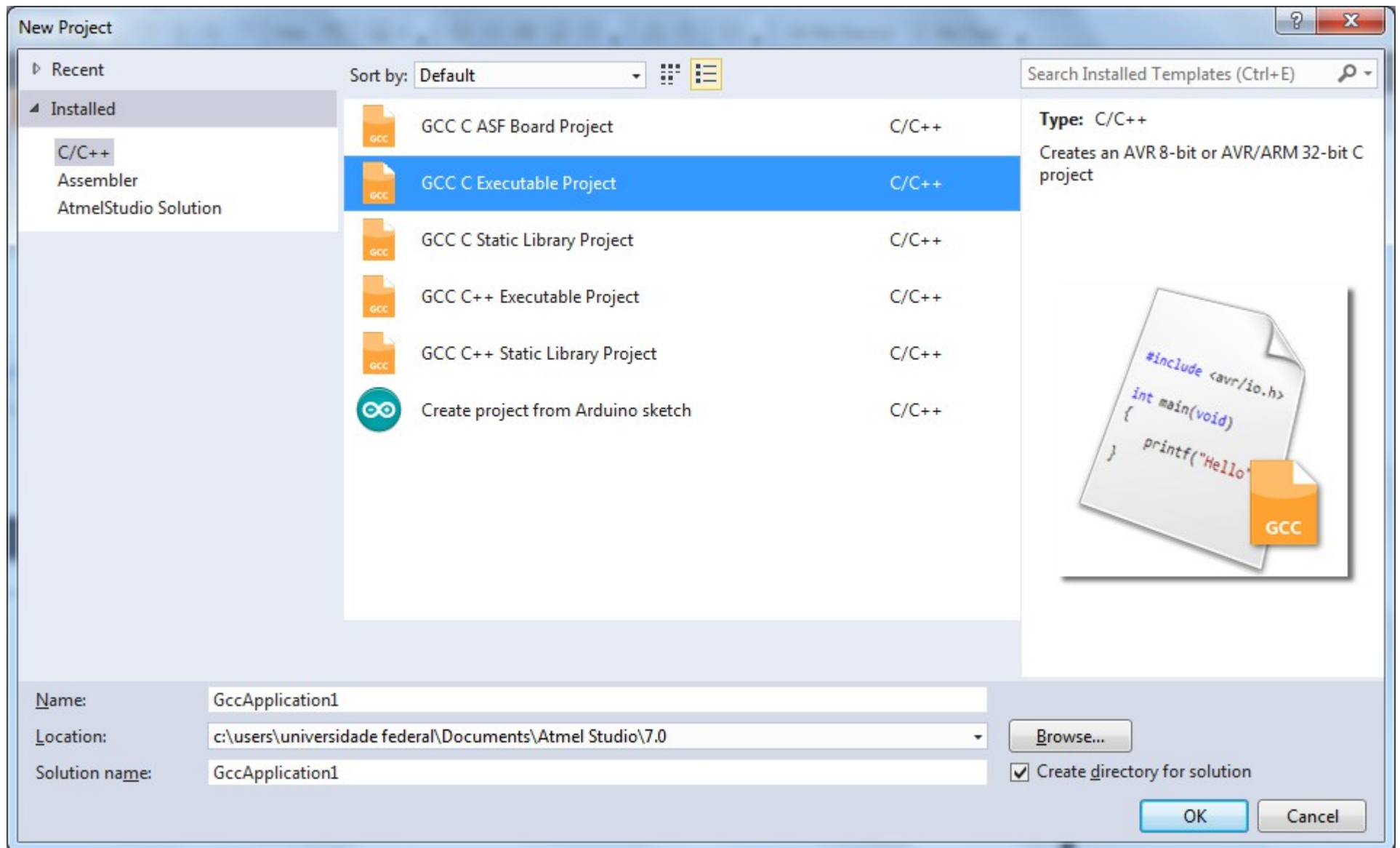


<http://www.atmel.com/Microsite/atmel-studio/>

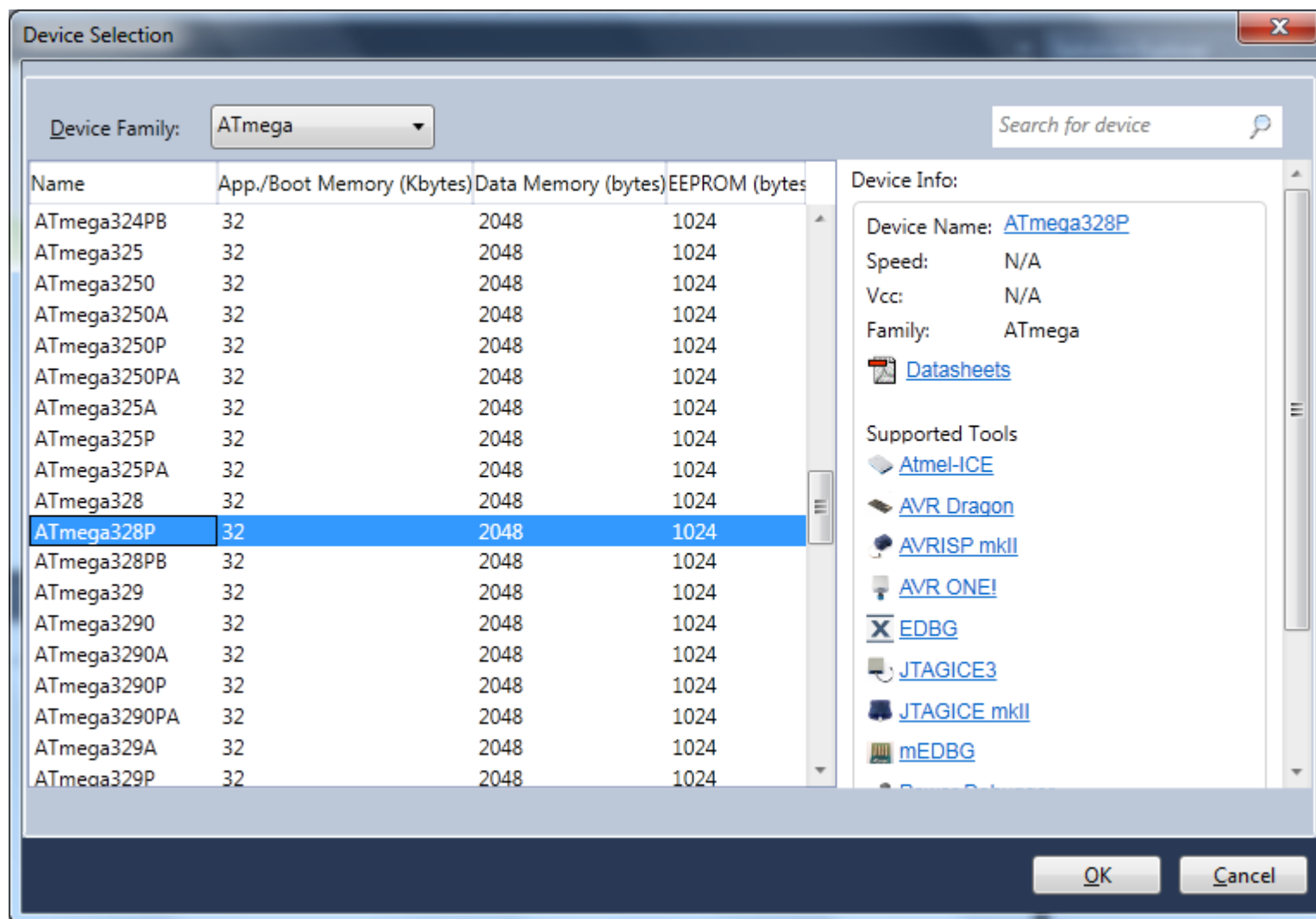
Novo projeto



Para criar um novo projeto no Atmel Studio acesse **File > New > Project**, conforme exibido na figura 1:

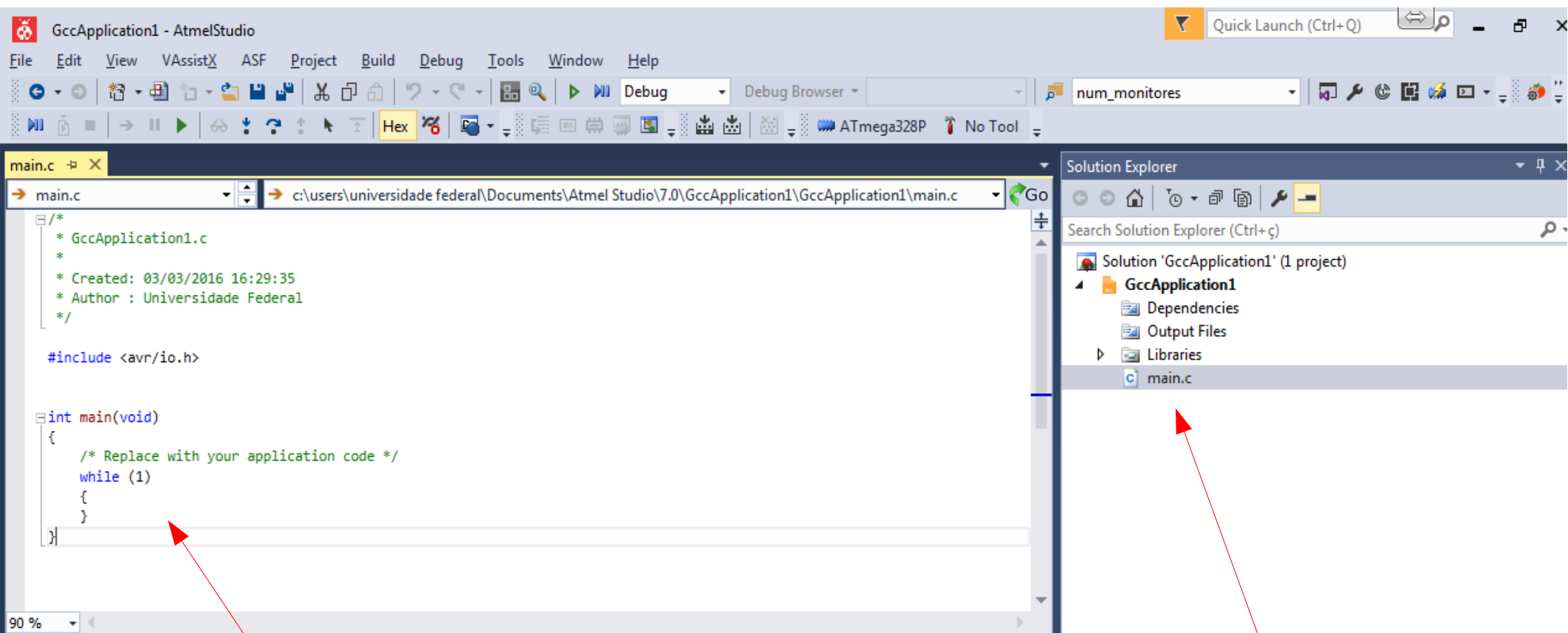


Será aberta uma janela para configuração do projeto. Nela é possível escolher o compilador, além do nome e do caminho da pasta onde o projeto será armazenado, conforme exibido na figura 2:



A seguir será apresentada uma janela para escolha do microcontrolador alvo. Neste caso foi escolhido o ATmega328P, microcontrolador da Arduino UNO, conforme exibido na figura 3:

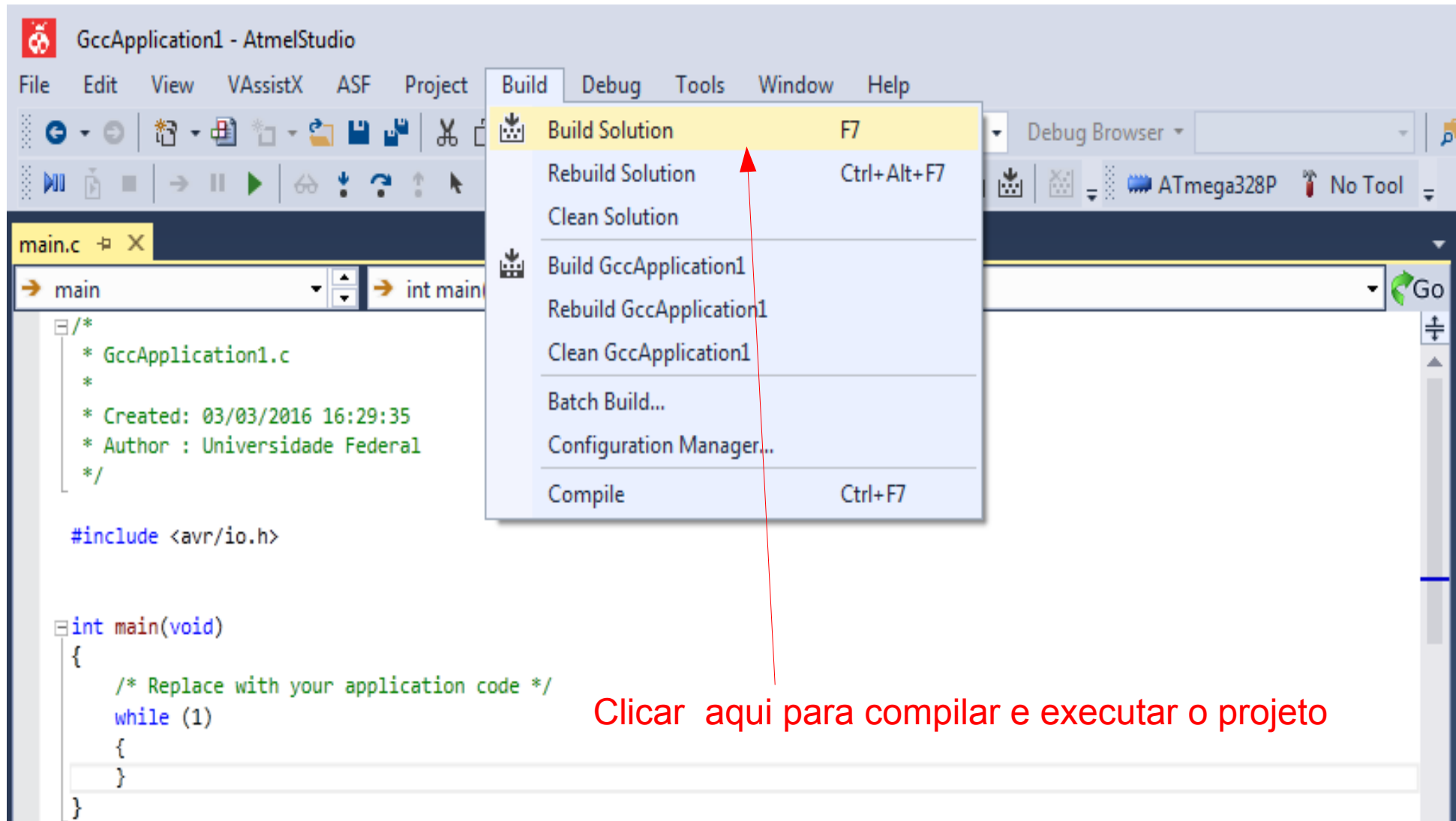
Organização de um projeto



Sempre há um laço infinito !

Sempre há um arquivo chamado main.c !

Compilação e execução do projeto



Clicar aqui para compilar e executar o projeto

Código em linguagem C

Compilação e execução do projeto

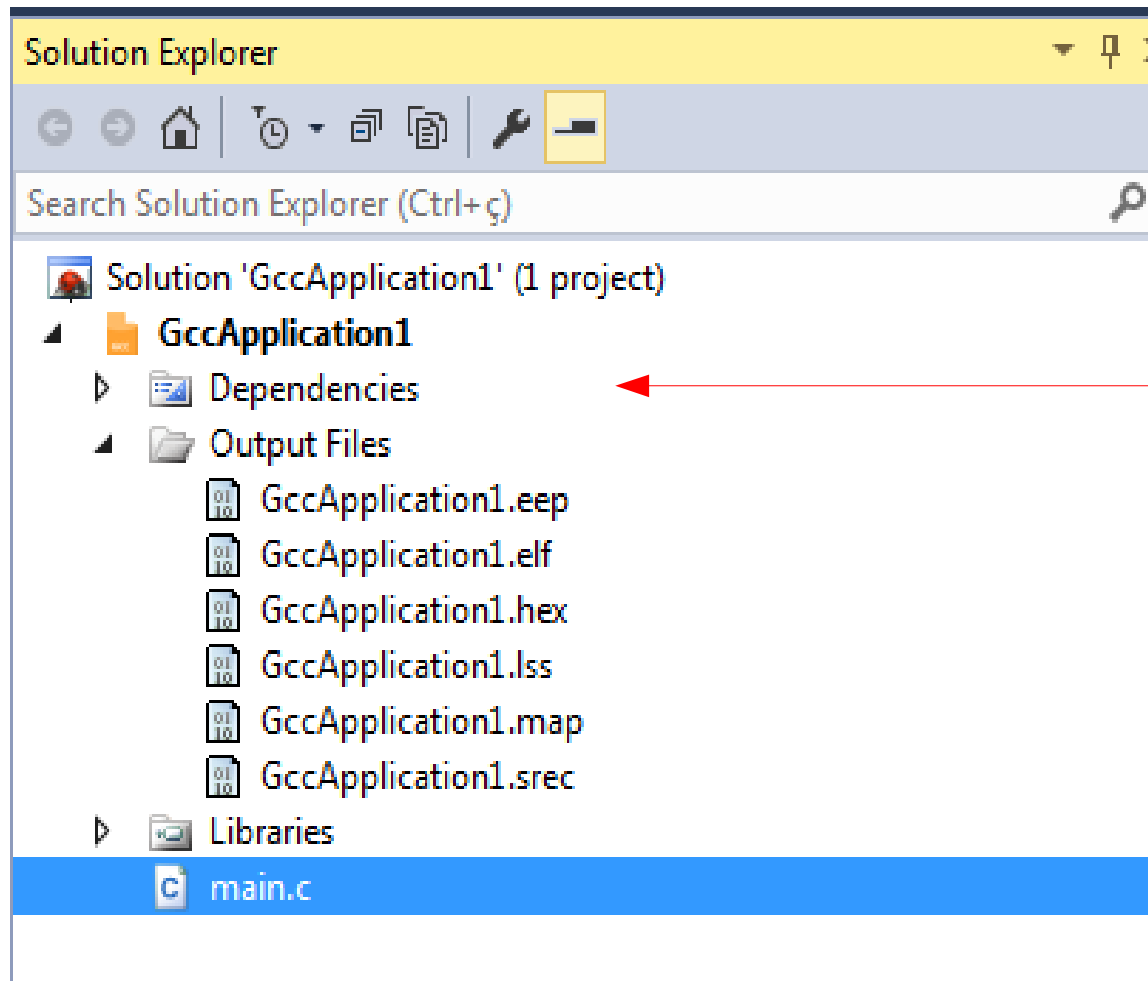
```
Show output from: Build
----- Build started: Project: GccApplication1, Configuration: Debug AVR -----
Build started.
Project "GccApplication1.cproj" (default targets):
Target "PreBuildEvent" skipped, due to false condition; ('$(PreBuildEvent)'!='') was evaluated as (''!='').
Target "CoreBuild" in file "C:\Program Files\Atmel\Studio\7.0\Vs\Compiler.targets" from project "c:\users\universidad
Using "RunCompilerTask" task from assembly "C:\Program Files\Atmel\Studio\7.0\Extensions\Application\AvrGCC.dll".
Task "RunCompilerTask"
  Shell Utils Path C:\Program Files\Atmel\Studio\7.0\shellUtils
  C:\Program Files\Atmel\Studio\7.0\shellUtils\make.exe all
  Building file: .././main.c
  Invoking: AVR/GNU C Compiler : 4.9.2
  "C:\Program Files\Atmel\Studio\7.0\toolchain\avr8\avr8-gnu-toolchain\bin\avr-gcc.exe" -x c -funsigned-char
  Finished building: .././main.c
  Building target: GccApplication1.elf
  Invoking: AVR/GNU Linker : 4.9.2
  "C:\Program Files\Atmel\Studio\7.0\toolchain\avr8\avr8-gnu-toolchain\bin\avr-gcc.exe" -o GccApplication1.elf
  Finished building target: GccApplication1.elf
  "C:\Program Files\Atmel\Studio\7.0\toolchain\avr8\avr8-gnu-toolchain\bin\avr-objcopy.exe" -O ihex -R .eeprom
  "C:\Program Files\Atmel\Studio\7.0\toolchain\avr8\avr8-gnu-toolchain\bin\avr-objcopy.exe" -j .eeprom --set-:
  "C:\Program Files\Atmel\Studio\7.0\toolchain\avr8\avr8-gnu-toolchain\bin\avr-objdump.exe" -h -S "GccApplicati
  "C:\Program Files\Atmel\Studio\7.0\toolchain\avr8\avr8-gnu-toolchain\bin\avr-objcopy.exe" -O srec -R .eeprom
  "C:\Program Files\Atmel\Studio\7.0\toolchain\avr8\avr8-gnu-toolchain\bin\avr-size.exe" "GccApplication1.elf"
    text    data    bss    dec    hex filename
    134      0      0    134    86 GccApplication1.elf
Done executing task "RunCompilerTask".
Using "RunOutputFileVerifyTask" task from assembly "C:\Program Files\Atmel\Studio\7.0\Extensions\Application\AvrC
Task "RunOutputFileVerifyTask"
  Program Memory Usage    :   134 bytes   0,4 % Full
  Data Memory Usage       :    0 bytes   0,0 % Full
Done executing task "RunOutputFileVerifyTask".
Done building target "CoreBuild" in project "GccApplication1.cproj".
```

Uso de memória

Ligação (linker)

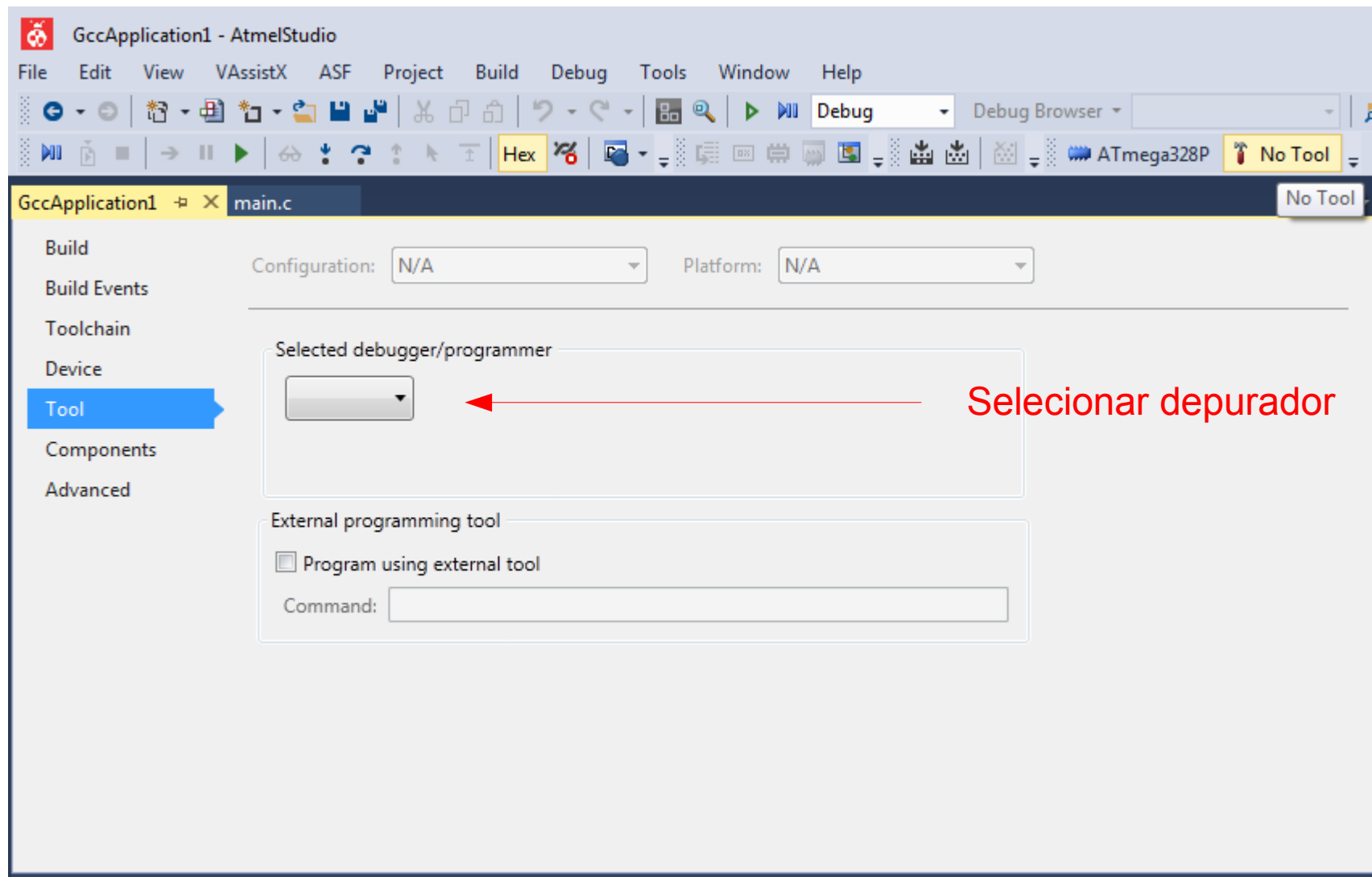
Compilação

Compilação e execução do projeto

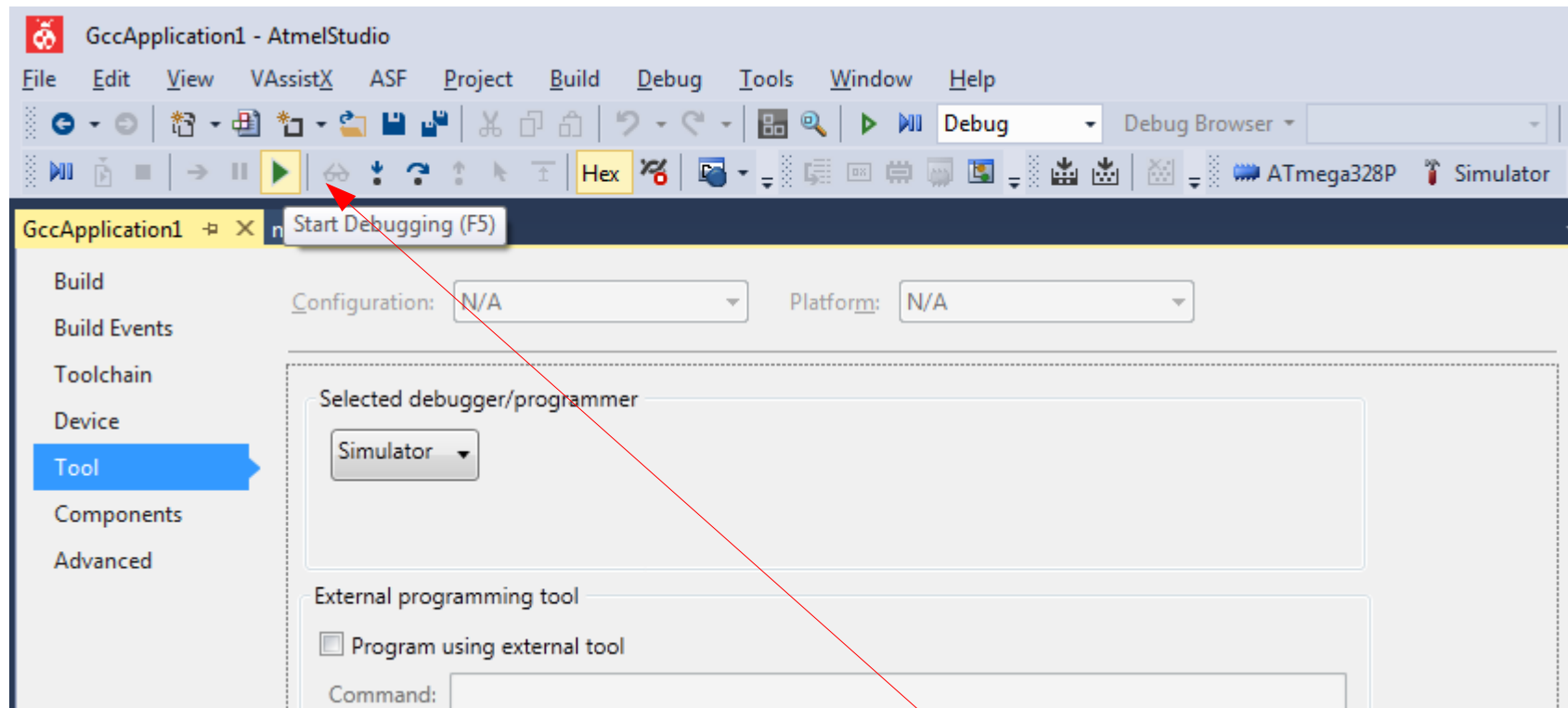


Arquivos gerados

Depuração/execução do projeto

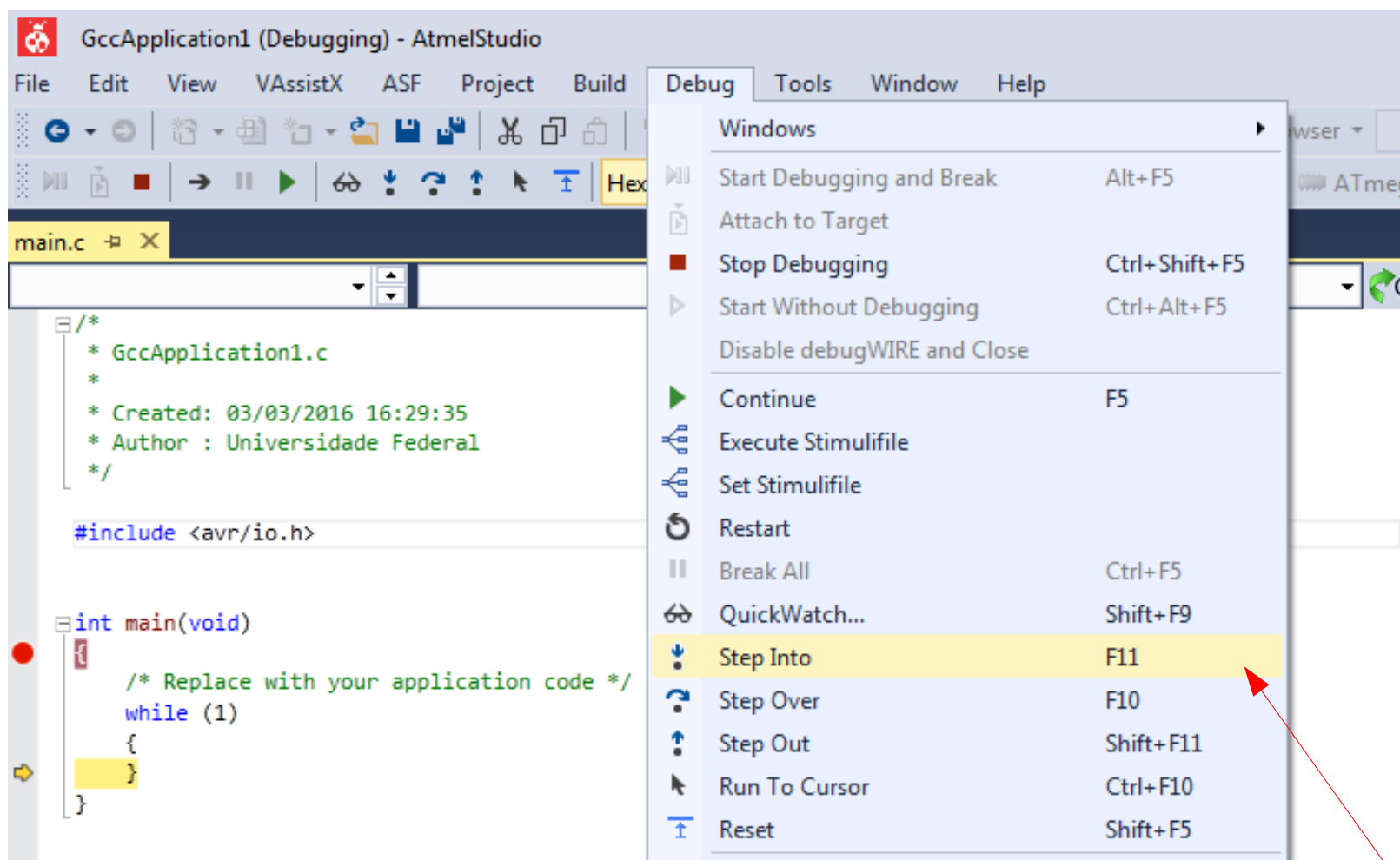


Depuração/execução do projeto



Executar (play)

Depuração/execução do projeto



Opções de depuração
(debug)