| **Functions** | **Blocks of Assembly Code** | **Explanation of Functionality** |
| --- | --- | --- |
| 0x0000000000000f5a main | 0x0000000000000f5a <+0>: push %rbp  0x0000000000000f5b <+1>: mov %rsp,%rbp  0x0000000000000f5e <+4>: push %rbx  0x0000000000000f5f <+5>: sub $0xb8,%rsp  0x0000000000000f66 <+12>: mov %fs:0x28,%rax  0x0000000000000f6f <+21>: mov %rax,-0x18(%rbp)  0x0000000000000f73 <+25>: xor %eax,%eax  0x0000000000000f75 <+27>: lea 0x4d9(%rip),%rsi # 0x1455  0x0000000000000f7c <+34>: lea 0x20109d(%rip),%rdi # 0x202020 <\_ZSt4cout@@GLIBCXX\_3.4>  0x0000000000000f83 <+41>: callq 0xdb0 <\_ZStlsISt11char\_traitsIcEERSt13basic\_ostreamIcT\_ES5\_PKc@plt>  0x0000000000000f88 <+46>: lea 0x2012d1(%rip),%rsi # 0x202260 <\_Z9firstNameB5cxx11>  0x0000000000000f8f <+53>: lea 0x2011aa(%rip),%rdi # 0x202140 <\_ZSt3cin@@GLIBCXX\_3.4>  0x0000000000000f96 <+60>: callq 0xdd0 <\_ZStrsIcSt11char\_traitsIcESaIcEERSt13basic\_istreamIT\_T0\_ES7\_RNSt7\_\_cxx1112basic\_stringIS4\_S5\_T1\_EE@plt>  0x0000000000000f9b <+65>: lea 0x4c6(%rip),%rsi # 0x1468  0x0000000000000fa2 <+72>: lea 0x201077(%rip),%rdi # 0x202020 <\_ZSt4cout@@GLIBCXX\_3.4>  0x0000000000000fa9 <+79>: callq 0xdb0 <\_ZStlsISt11char\_traitsIcEERSt13basic\_ostreamIcT\_ES5\_PKc@plt>  0x0000000000000fae <+84>: lea 0x2012cb(%rip),%rsi # 0x202280 <\_Z8lastNameB5cxx11>  0x0000000000000fb5 <+91>: lea 0x201184(%rip),%rdi # 0x202140 <\_ZSt3cin@@GLIBCXX\_3.4>  0x0000000000000fbc <+98>: callq 0xdd0 <\_ZStrsIcSt11char\_traitsIcESaIcEERSt13basic\_istreamIT\_T0\_ES7\_RNSt7\_\_cxx1112basic\_stringIS4\_S5\_T1\_EE@plt>  0x0000000000000fc1 <+103>: lea 0x4b2(%rip),%rsi # 0x147a  0x0000000000000fc8 <+110>: lea 0x201051(%rip),%rdi # 0x202020 <\_ZSt4cout@@GLIBCXX\_3.4>  0x0000000000000fcf <+117>: callq 0xdb0 <\_ZStlsISt11char\_traitsIcEERSt13basic\_ostreamIcT\_ES5\_PKc@plt>  0x0000000000000fd4 <+122>: lea 0x2012c5(%rip),%rsi # 0x2022a0 <\_Z4cityB5cxx11>  0x0000000000000fdb <+129>: lea 0x20115e(%rip),%rdi # 0x202140 <\_ZSt3cin@@GLIBCXX\_3.4>  0x0000000000000fe2 <+136>: callq 0xdd0 <\_ZStrsIcSt11char\_traitsIcESaIcEERSt13basic\_istreamIT\_T0\_ES7\_RNSt7\_\_cxx1112basic\_stringIS4\_S5\_T1\_EE@plt>  0x0000000000000fe7 <+141>: lea -0xc0(%rbp),%rax  0x0000000000000fee <+148>: lea 0x20126b(%rip),%rdx # 0x202260 <\_Z9firstNameB5cxx11>  0x0000000000000ff5 <+155>: lea 0x494(%rip),%rsi # 0x1490  0x0000000000000ffc <+162>: mov %rax,%rdi  0x0000000000000fff <+165>: callq 0x1260 <\_ZStplIcSt11char\_traitsIcESaIcEENSt7\_\_cxx1112basic\_stringIT\_T0\_T1\_EEPKS5\_RKS8\_>  0x0000000000001004 <+170>: lea -0xa0(%rbp),%rax  0x000000000000100b <+177>: lea -0xc0(%rbp),%rcx  0x0000000000001012 <+184>: lea 0x481(%rip),%rdx # 0x149a  0x0000000000001019 <+191>: mov %rcx,%rsi  0x000000000000101c <+194>: mov %rax,%rdi  0x000000000000101f <+197>: callq 0x132a <\_ZStplIcSt11char\_traitsIcESaIcEENSt7\_\_cxx1112basic\_stringIT\_T0\_T1\_EEOS8\_PKS5\_>  0x0000000000001024 <+202>: lea -0x80(%rbp),%rax  0x0000000000001028 <+206>: lea -0xa0(%rbp),%rcx  0x000000000000102f <+213>: lea 0x20124a(%rip),%rdx # 0x202280 <\_Z8lastNameB5cxx11>  0x0000000000001036 <+220>: mov %rcx,%rsi  0x0000000000001039 <+223>: mov %rax,%rdi  0x000000000000103c <+226>: callq 0x1371 <\_ZStplIcSt11char\_traitsIcESaIcEENSt7\_\_cxx1112basic\_stringIT\_T0\_T1\_EEOS8\_RKS8\_>  0x0000000000001041 <+231>: lea -0x60(%rbp),%rax  0x0000000000001045 <+235>: lea -0x80(%rbp),%rcx  0x0000000000001049 <+239>: lea 0x44c(%rip),%rdx # 0x149c  0x0000000000001050 <+246>: mov %rcx,%rsi  0x0000000000001053 <+249>: mov %rax,%rdi  ---Type <return> to continue, or q <return> to quit---  0x0000000000001056 <+252>: callq 0x132a <\_ZStplIcSt11char\_traitsIcESaIcEENSt7\_\_cxx1112basic\_stringIT\_T0\_T1\_EEOS8\_PKS5\_>  0x000000000000105b <+257>: lea -0x40(%rbp),%rax  0x000000000000105f <+261>: lea -0x60(%rbp),%rcx  0x0000000000001063 <+265>: lea 0x201236(%rip),%rdx # 0x2022a0 <\_Z4cityB5cxx11>  0x000000000000106a <+272>: mov %rcx,%rsi  0x000000000000106d <+275>: mov %rax,%rdi  0x0000000000001070 <+278>: callq 0x1371 <\_ZStplIcSt11char\_traitsIcESaIcEENSt7\_\_cxx1112basic\_stringIT\_T0\_T1\_EEOS8\_RKS8\_>  0x0000000000001075 <+283>: lea -0x40(%rbp),%rax  0x0000000000001079 <+287>: mov %rax,%rsi  0x000000000000107c <+290>: lea 0x200f9d(%rip),%rdi # 0x202020 <\_ZSt4cout@@GLIBCXX\_3.4>  0x0000000000001083 <+297>: callq 0xda0 <\_ZStlsIcSt11char\_traitsIcESaIcEERSt13basic\_ostreamIT\_T0\_ES7\_RKNSt7\_\_cxx1112basic\_stringIS4\_S5\_T1\_EE@plt>  0x0000000000001088 <+302>: lea -0x40(%rbp),%rax  0x000000000000108c <+306>: mov %rax,%rdi  0x000000000000108f <+309>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x0000000000001094 <+314>: lea -0x60(%rbp),%rax  0x0000000000001098 <+318>: mov %rax,%rdi  0x000000000000109b <+321>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x00000000000010a0 <+326>: lea -0x80(%rbp),%rax  0x00000000000010a4 <+330>: mov %rax,%rdi  0x00000000000010a7 <+333>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x00000000000010ac <+338>: lea -0xa0(%rbp),%rax  0x00000000000010b3 <+345>: mov %rax,%rdi  0x00000000000010b6 <+348>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x00000000000010bb <+353>: lea -0xc0(%rbp),%rax  0x00000000000010c2 <+360>: mov %rax,%rdi  0x00000000000010c5 <+363>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x00000000000010ca <+368>: mov $0x0,%eax  0x00000000000010cf <+373>: mov -0x18(%rbp),%rdx  0x00000000000010d3 <+377>: xor %fs:0x28,%rdx  0x00000000000010dc <+386>: je 0x1149 <main+495>  0x00000000000010de <+388>: jmp 0x1144 <main+490>  0x00000000000010e0 <+390>: mov %rax,%rbx  0x00000000000010e3 <+393>: lea -0x40(%rbp),%rax  0x00000000000010e7 <+397>: mov %rax,%rdi  0x00000000000010ea <+400>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x00000000000010ef <+405>: jmp 0x10f4 <main+410>  0x00000000000010f1 <+407>: mov %rax,%rbx  0x00000000000010f4 <+410>: lea -0x60(%rbp),%rax  0x00000000000010f8 <+414>: mov %rax,%rdi  0x00000000000010fb <+417>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x0000000000001100 <+422>: jmp 0x1105 <main+427>  0x0000000000001102 <+424>: mov %rax,%rbx  0x0000000000001105 <+427>: lea -0x80(%rbp),%rax  0x0000000000001109 <+431>: mov %rax,%rdi  0x000000000000110c <+434>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x0000000000001111 <+439>: jmp 0x1116 <main+444>  0x0000000000001113 <+441>: mov %rax,%rbx  0x0000000000001116 <+444>: lea -0xa0(%rbp),%rax  ---Type <return> to continue, or q <return> to quit---  0x000000000000111d <+451>: mov %rax,%rdi  0x0000000000001120 <+454>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x0000000000001125 <+459>: jmp 0x112a <main+464>  0x0000000000001127 <+461>: mov %rax,%rbx  0x000000000000112a <+464>: lea -0xc0(%rbp),%rax  0x0000000000001131 <+471>: mov %rax,%rdi  0x0000000000001134 <+474>: callq 0xe48 <\_ZNSt7\_\_cxx1112basic\_stringIcSt11char\_traitsIcESaIcEED1Ev@plt>  0x0000000000001139 <+479>: mov %rbx,%rax  0x000000000000113c <+482>: mov %rax,%rdi  0x000000000000113f <+485>: callq 0xe10 <\_Unwind\_Resume@plt>  0x0000000000001144 <+490>: callq 0xdc0 <\_\_stack\_chk\_fail@plt>  0x0000000000001149 <+495>: add $0xb8,%rsp  0x0000000000001150 <+502>: pop %rbx  0x0000000000001151 <+503>: pop %rbp  0x0000000000001152 <+504>: retq | Ask user to input a first and last name, as well as a city. Saves the users input into 3 variables and then prints the information out to the console. |