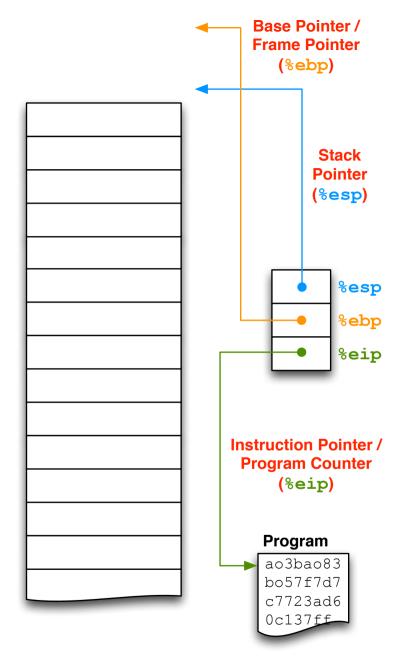
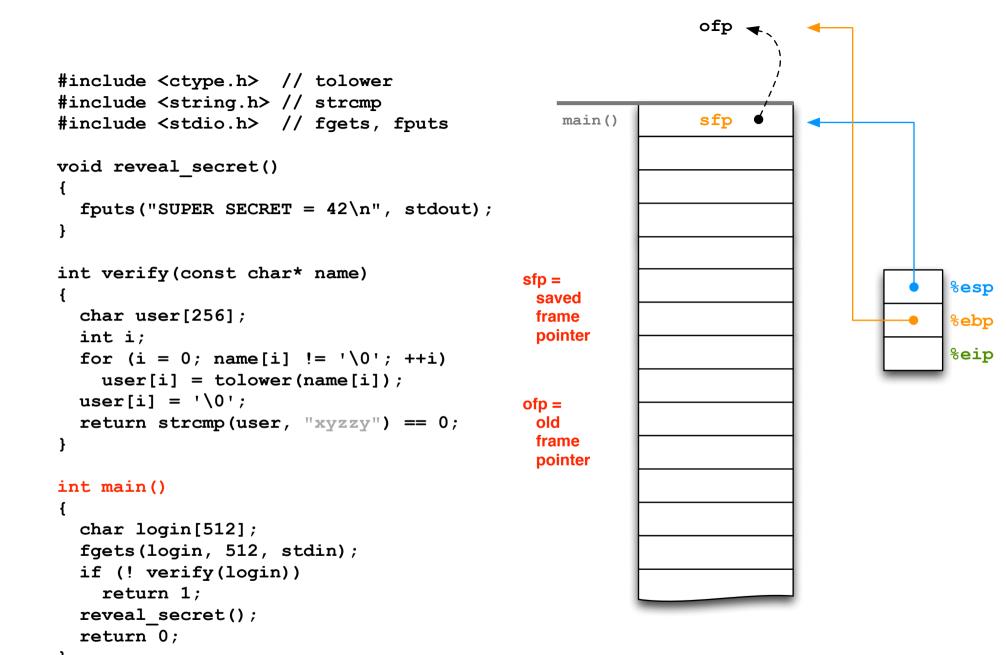
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                            0xc0000000
#include <stdio.h> // fgets, fputs
                                           high address
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
                                            0 \times 08048000
    return 1;
                                            low address
  reveal secret();
```

return 0;

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                             0xc0000000
#include <stdio.h> // fgets, fputs
                                            high address
                                                         32bit = 4 bytes/row
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
                                           Stack
int verify(const char* name)
                                           Growth
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                           Read / Write
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
                                             0 \times 08048000
    return 1;
                                             low address
  reveal secret();
  return 0;
```

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

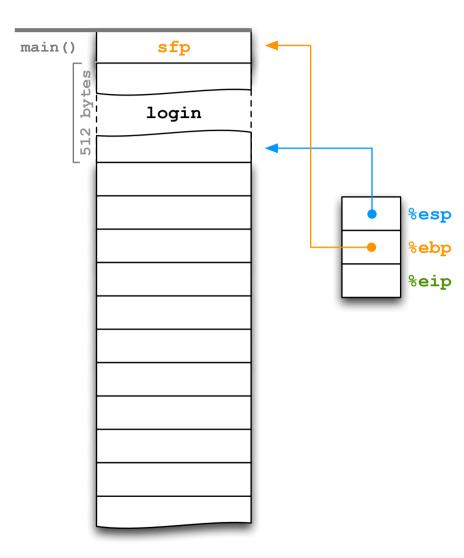




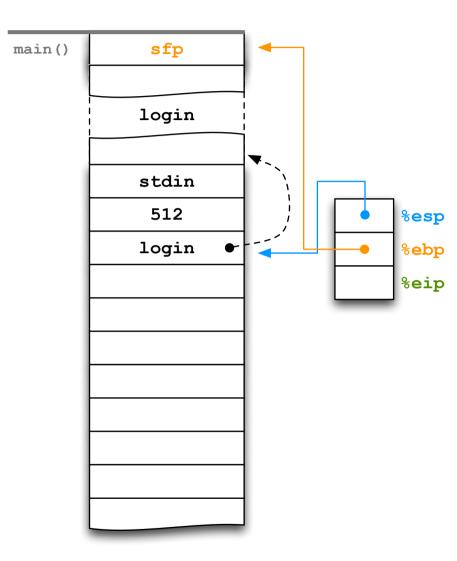
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                                            sfp
                                               main()
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
                                           sfp =
                                                                                   %esp
                                            saved
  char user[256];
                                            frame
                                                                                   %ebp
                                            pointer
  int i;
                                                                                   %eip
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
```

return 0;

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

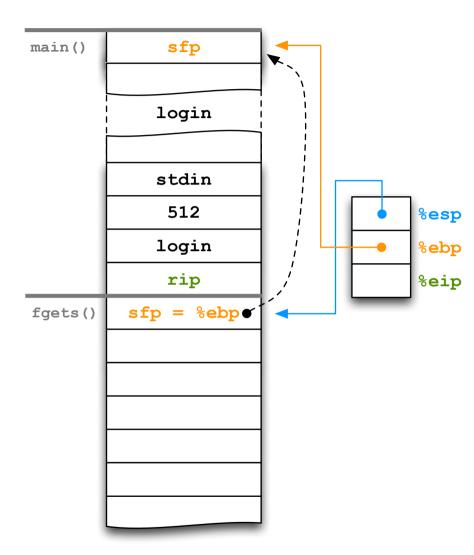


```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

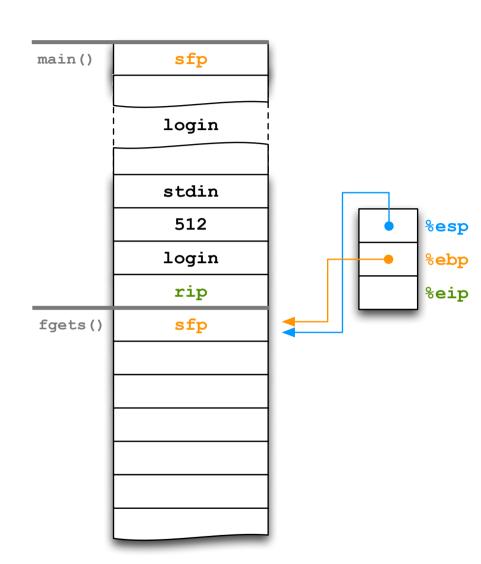


```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                                 main()
                                                              sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                             login
  fputs("SUPER SECRET = 42\n", stdout);
                                                             stdin
int verify(const char* name)
                                                              512
                                                                                      %esp
                                            rip =
  char user[256];
                                                             login
                                                                                       %ebp
                                              return
  int i;
                                             instruction
                                                              rip
                                                                                       %eip
  for (i = 0; name[i] != '\0'; ++i)
                                              pointer
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                                            next instruction
                                                                            after CALL
int main()
  char login[512];
                                                                              Program
  fgets(login, 512, stdin);
                                                                              de3bao83
  if (! verify(login))
                                                                              bo57f7d7
    return 1;
                                                                              c772ded6
  reveal secret();
                                                                               0c137ff_
  return 0;
                                                                              CALL instruction
```

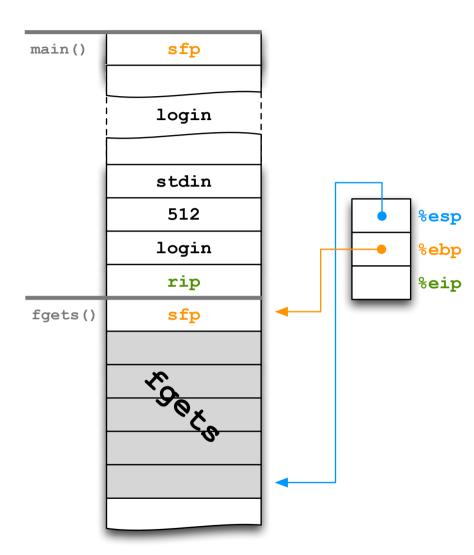
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



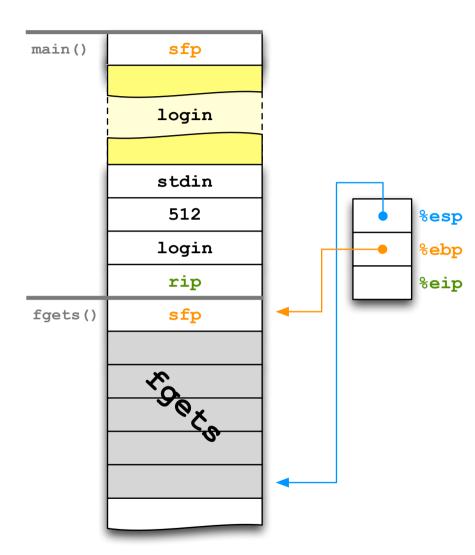
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



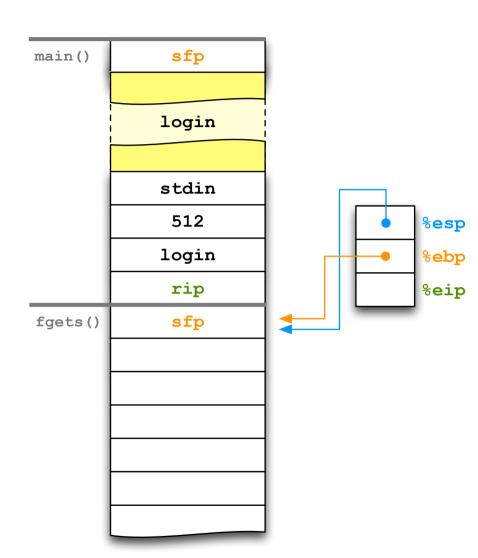
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

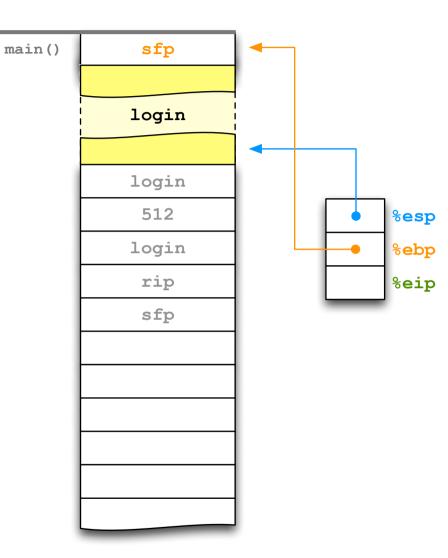


```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

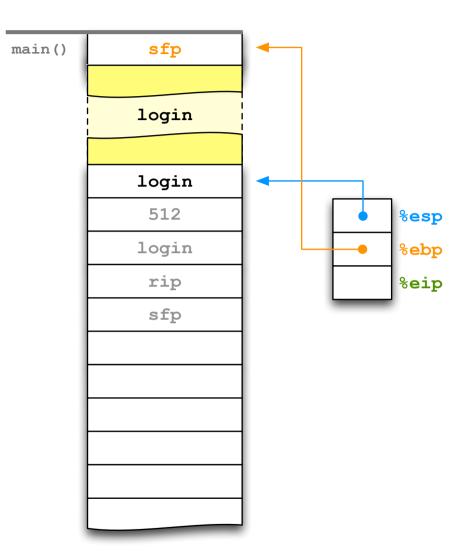


```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                              main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          stdin
int verify(const char* name)
                                                           512
                                                                                  %esp
  char user[256];
                                                          login
                                                                                  %ebp
  int i;
                                                           rip
                                                                                  %eip
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                              fgets()
                                                           sfp
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
  return 1;
  reveal secret();
  return 0;
```

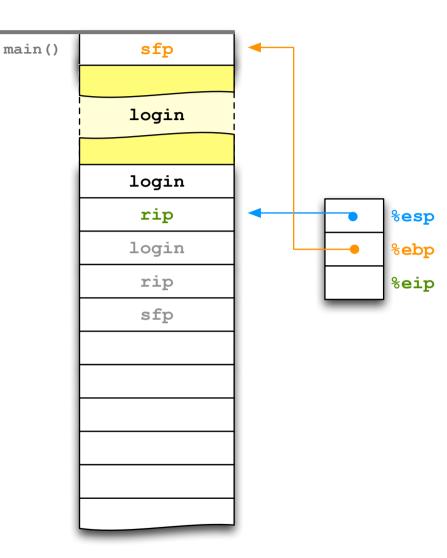
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



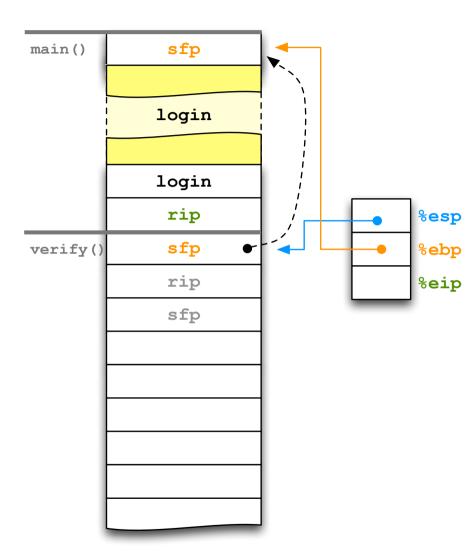
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



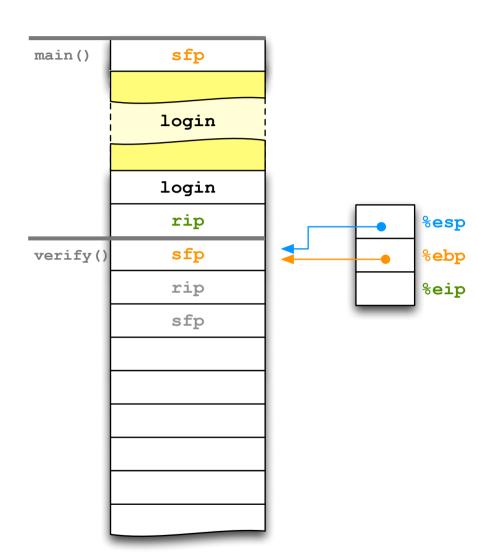
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



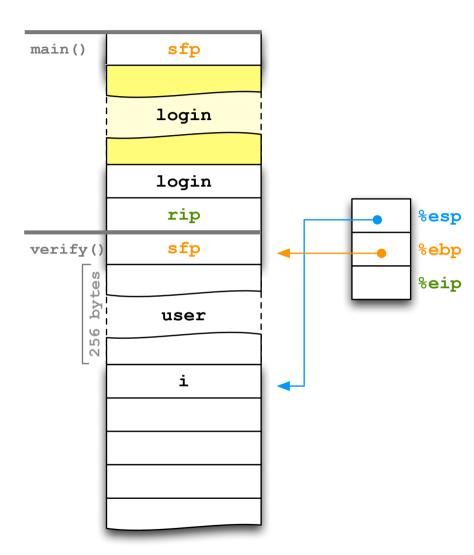
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



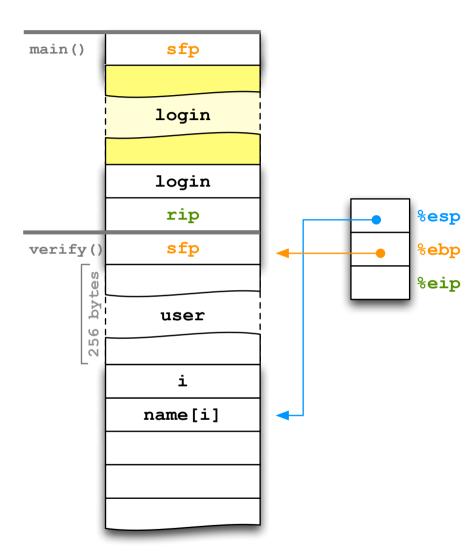
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



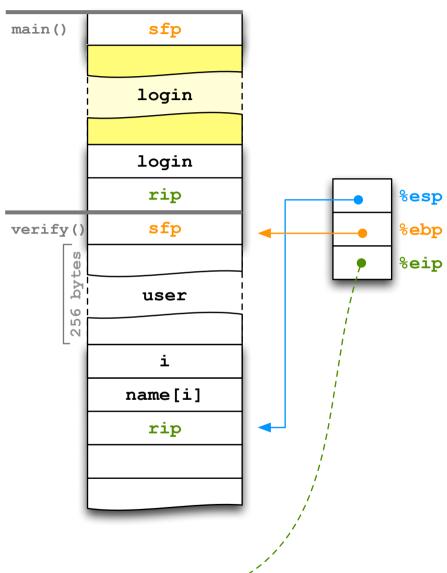
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



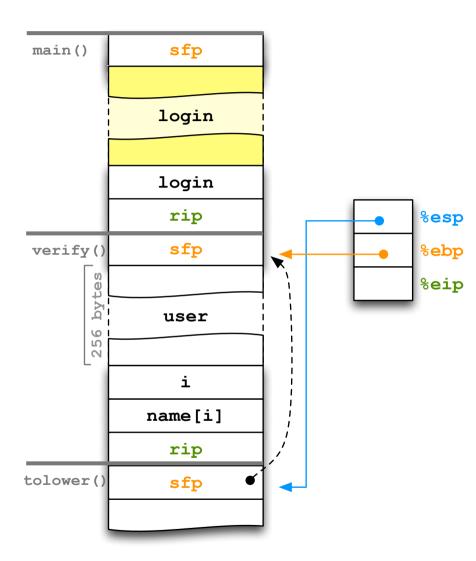
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



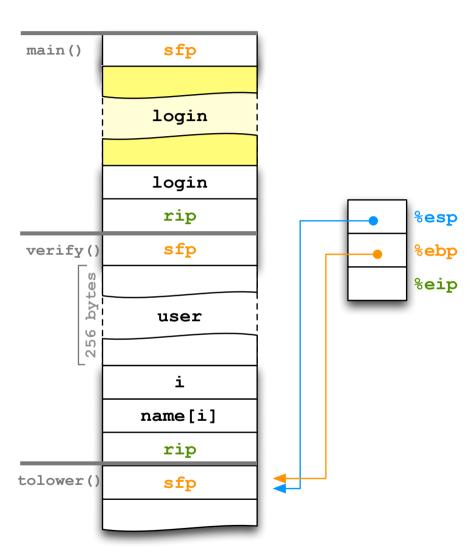
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                              main()
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
                                              verify()
  int i;
  for (i = 0; name[i] != '\0'; ++i)
   user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                              main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
  char user[256];
                                              verify()
                                                           sfp
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                          user
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                    S
                                                            i
int main()
                                                         name[i]
                                                           rip
  char login[512];
  fgets(login, 512, stdin);
                                             tolower()
                                                           sfp
  if (! verify(login))
                                                     tolower
    return 1;
  reveal secret();
  return 0;
```

%esp

%ebp

%eip

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                            sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                           login
  fputs("SUPER SECRET = 42\n", stdout);
                                                           login
int verify(const char* name)
                                                            rip
                                                                                   %esp
  char user[256];
                                                            sfp
                                               verify()
                                                                                   %ebp
  int i;
                                                                                   %eip
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = '\0';
                                                    256
  return strcmp(user, "xyzzy") == 0;
                                                             i
int main()
                                                          name[i]
                                                            rip
  char login[512];
  fgets(login, 512, stdin);
                                              tolower()
                                                            sfp
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

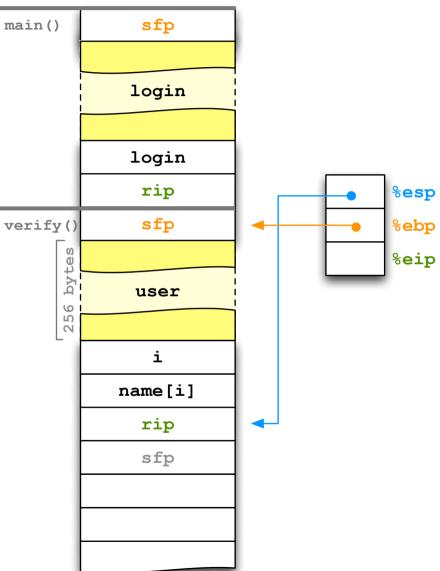
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                            sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                           login
  fputs("SUPER SECRET = 42\n", stdout);
                                                           login
int verify(const char* name)
                                                            rip
  char user[256];
                                                            sfp
                                               verify()
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = '\0';
                                                    256
  return strcmp(user, "xyzzy") == 0;
                                                             i
int main()
                                                          name[i]
                                                            rip
  char login[512];
  fgets(login, 512, stdin);
                                              tolower()
                                                            sfp
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

%esp

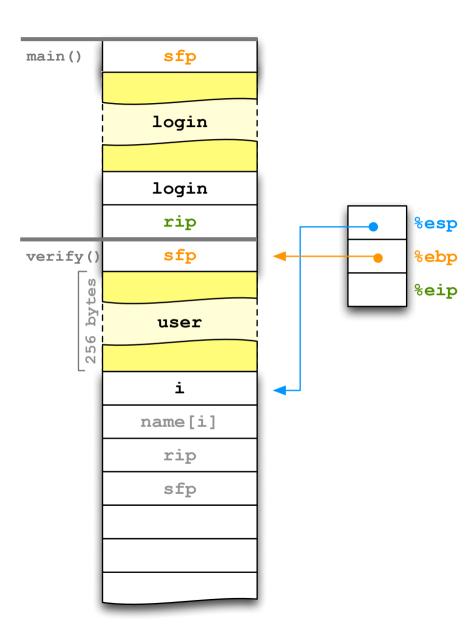
%ebp

%eip

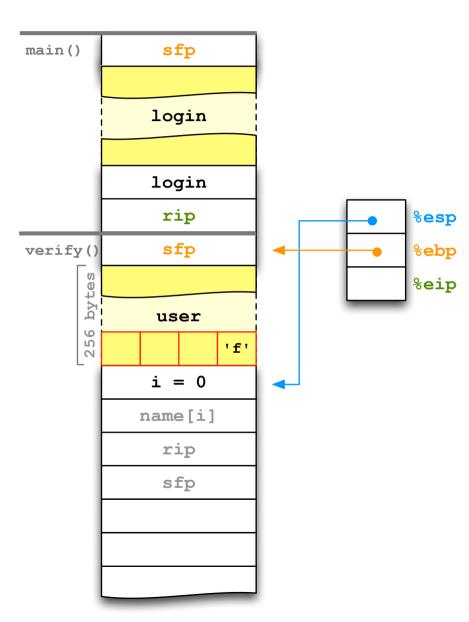
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                              main()
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                   S
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



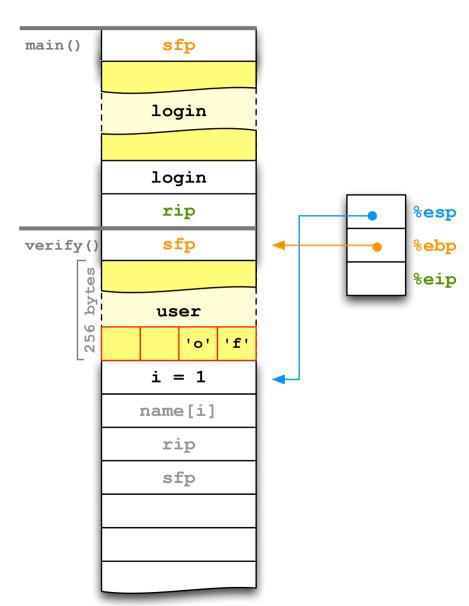
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



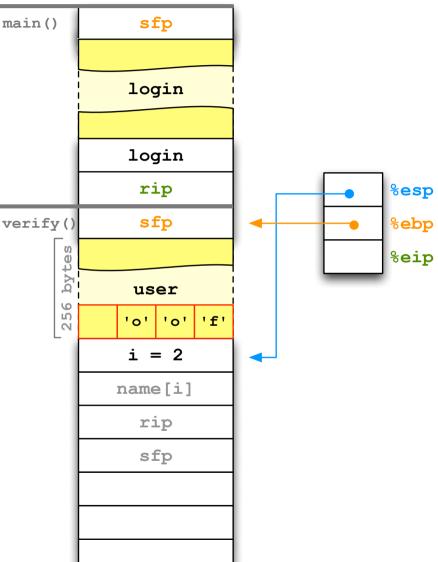
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



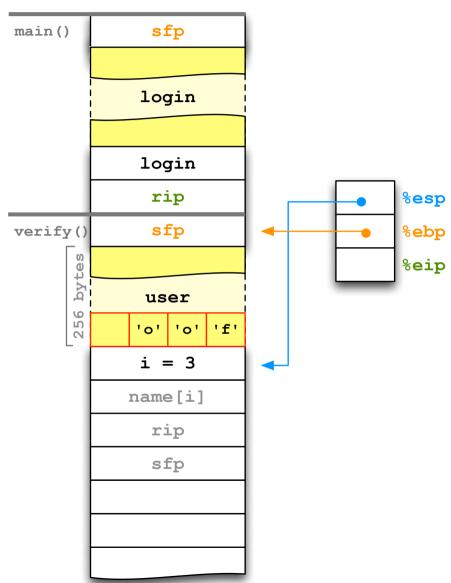
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



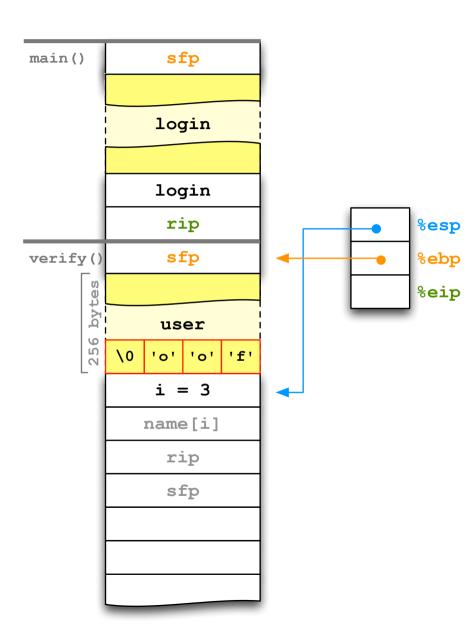
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
                                               verify()
  int i;
                                                     bytes
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



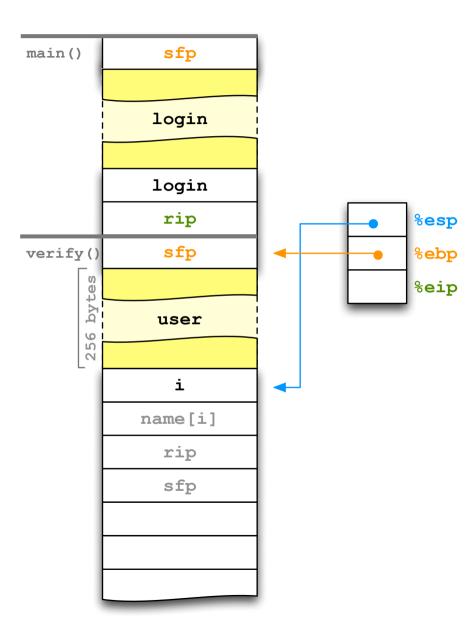
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



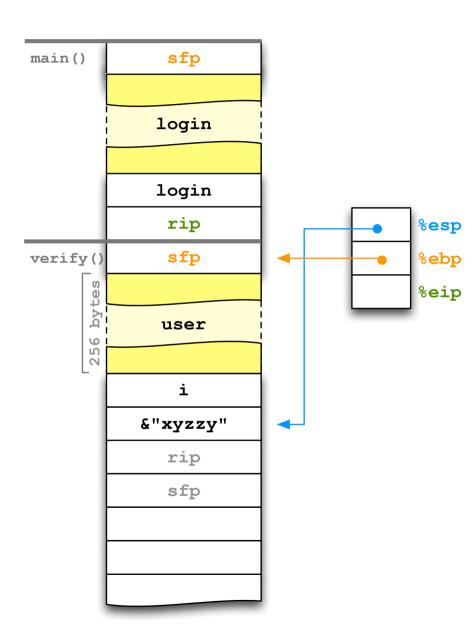
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



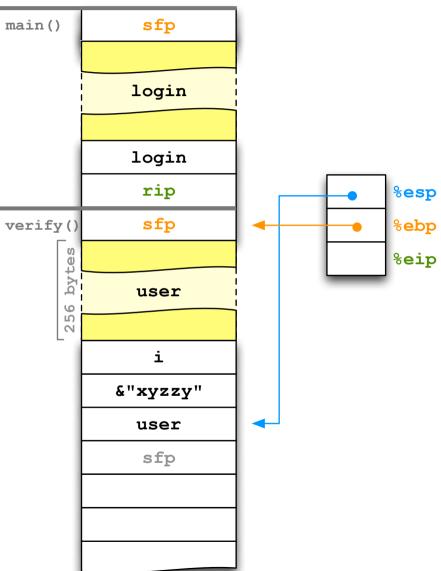
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

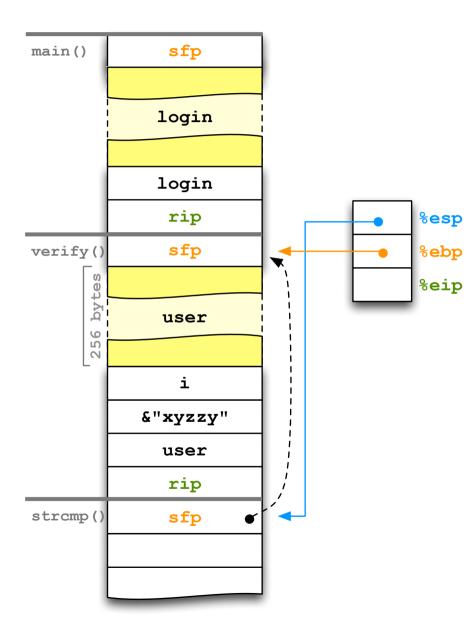


```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
                                                                                   %esp
  char user[256];
                                                           sfp
                                               verify()
                                                                                   %ebp
  int i;
                                                                                   %eip
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                            sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                           login
  fputs("SUPER SECRET = 42\n", stdout);
                                                           login
int verify(const char* name)
                                                            rip
  char user[256];
                                               verify()
                                                            sfp
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = ' \ 0';
                                                    256
  return strcmp(user, "xyzzy") == 0;
                                                             i
                                                          &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                            rip
  if (! verify(login))
                                               strcmp()
                                                            sfp
    return 1;
  reveal secret();
  return 0;
```

%ebp

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                              main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
  char user[256];
                                              verify()
                                                           sfp
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                    S
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
                                              strcmp()
                                                           sfp
    return 1;
                                                       stremp
  reveal secret();
  return 0;
```

%ebp

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                            sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
  char user[256];
                                                            sfp
                                               verify()
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
                                                    S
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
                                                            sfp
    return 1;
  reveal secret();
  return 0;
```

%ebp

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
                                                                                  %esp
  char user[256];
                                                           sfp
                                                                                  %ebp
                                              verify()
  int i;
                                                                                   %eip
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
                                                           sfp
    return 1;
  reveal secret();
  return 0;
```

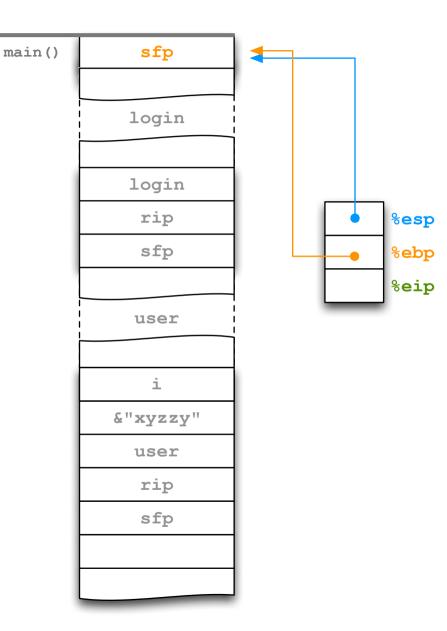
```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
                                                                                  %esp
  char user[256];
                                                           sfp
                                              verify()
                                                                                   %ebp
  int i;
                                                                                   %eip
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
                                                           sfp
    return 1;
  reveal secret();
  return 0;
```

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                               main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
                                                                                  %esp
  char user[256];
                                                           sfp
                                                                                  %ebp
  int i;
                                                                                   %eip
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
                                                           sfp
    return 1;
  reveal secret();
  return 0;
```

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                              main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
  char user[256];
                                                           sfp
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
                                                           sfp
    return 1;
  reveal secret();
  return 0;
```

%ebp

```
#include <ctype.h> // tolower
#include <string.h> // strcmp
#include <stdio.h> // fgets, fputs
void reveal secret()
  fputs("SUPER SECRET = 42\n", stdout);
int verify(const char* name)
  char user[256];
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
  user[i] = ' \ 0';
  return strcmp(user, "xyzzy") == 0;
int main()
  char login[512];
  fgets(login, 512, stdin);
  if (! verify(login))
    return 1;
  reveal secret();
  return 0;
```



```
#include <ctype.h> // tolower
#include <string.h> // strcmp
                                              main()
                                                           sfp
#include <stdio.h> // fgets, fputs
void reveal secret()
                                                          login
  fputs("SUPER SECRET = 42\n", stdout);
                                                          login
int verify(const char* name)
                                                           rip
  char user[256];
                                                           sfp
  int i;
  for (i = 0; name[i] != '\0'; ++i)
    user[i] = tolower(name[i]);
                                                           user
  user[i] = '\0';
  return strcmp(user, "xyzzy") == 0;
                                                            i
                                                         &"xyzzy"
int main()
                                                           user
  char login[512];
  fgets(login, 512, stdin);
                                                           rip
  if (! verify(login))
                                                           sfp
    return 1;
  reveal secret();
  return 0;
```

%ebp