Федеральное государственное автономное образовательное учреждение высшего образования «СИБИРСКИЙ ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»

Институт космических и информационных технологий			
	институт		
Кафедра «Информатика»			
кафедра			
ΟΤΉΕΤ Ο ΠΑΓΩΡΑΤΩΡΙΙΩЙ ΒΑΓΩΤΕ			
ОТЧЕТ О ЛАБОРАТОРНОЙ РАБОТЕ			
Лабораторная работа №5. Взаимодействие процессов в ОС GNU/Linux			
	Тема		
Преподаватель			А. С. Кузнецов
		подпись, дата	инициалы, фамилия
Студент	КИ19-17/16 031939175		А. Д. Непомнящий
	номер группы, зачетной книжки	подпись, дата	инициалы, фамилия

1 Цель работы

Цель состоит в особенностей межпроцессного взаимодействия в ОС GNU/Linux.

2 Задачи

Выполнение работы сводится к следующим задачам.

- 1. Ознакомление с теоретическим материалом по управлению областями виртуальной памяти в ОС GNU/Linux.
- 2. Разработка серверной и клиентской частей приложения в соответствии с полученным заданием, должен использоваться механизм Internet-сокетов и сетевых протоколов.
- 3. Написание настоящего отчета защита его с исходными текстами и исполняемым модулем программы. Исходные тексты программ должны содержать комментарии в стиле системы doxygen, настоящий отчет должен включать содержимое скрипта configure.

Требуется разработать две программы: первая реализует серверную часть, вторая — клиентскую часть. Обмен данными между ними организуется посредством механизма Internet-сокетов и протокола ТСР либо UDP. Результат выполнения выводится на терминал/консоль. Должен использоваться интерфейс командной строки (CLI). При реализации обязательно использование изученных в лекционном курсе системных вызовов (ОС Linux), предназначенных для работы с сокетами. Программный код, относящийся к пользовательскому интерфейсу, должен быть физически отделен от кода, реализующего межпроцессное взаимодействие, и оба они, в свою очередь, отделены от кода реализации основной логики, например, вычислений.

Вариант 14. Клиент принимает от пользователя беззнаковое целое число N – основание системы счисления (диапазон (1..20]) и последовательность цифр в соответствии с заданной системой счисления, отсылает серверу. Сервер принимает основание системы счисления и число в этой системе, выводит число на экран, переводит его в десятичную систему, выводит на экран, осуществляет

его реверс (меняет порядок следования знаков на обратный), выводит на экран значение измененной последовательности, переводит ее в десятичную систему и выводит его на экран.

3 Исходные тексты программы

3.1 int open (const char * file, int oflag, ...);

Далее приведено содержимое файлов с исходным ходом программы.

Листинг 1 - Код в файле task 14.h

```
/*! \file task14.h
* \brief Header file of functions with numeral systems
           essential for task 14
 * /
#include <stdbool.h>
#include "input.h"
#include <inttypes.h>
#ifndef LAB1 TASK14 H
#define LAB1 TASK14 H
/*! \struct taskData
 * \brief Struct for PerformTask() function
 * \details Keeps data that is used as PerformTask() argument
 * /
typedef struct
    /*!
    * Number in required numeric system
   char number[INPUT SIZE];
    * Radix of numeric system
    int8 t radix;
} taskData;
/*! \brief Performs task14 with required output
 * \param data argument for task 14
void PerformTask(taskData* data);
/*! \brief Converts number in any (2-20) numeral system to decimal
 * \param number number to convert.
 * \param radix radix of numeral system.
 * \return Integer conversion result.
 * /
int AnyNumeralSystemToDecimal(char* number, int radix);
/*! \brief Checks if number only contains digits, allowed for this numeral
* system
   \param numberToCheck number to check.
   \param radix radix of numeral system.
 * \return true if number only contains digits, allowed for this numeral
```

Окончание листинга 1

```
* system, false - otherwise.
bool CheckRadixMatch(char* numberToCheck, int radix);
/*! \brief Checks if number is not too big to be written to int after
 * conversion
   \param numberToCheck number to check.
 * \param radix radix of numeral system.
 * \return true if number is not too big to be written to int after
 * conversion, false - otherwise
 * /
bool CheckIntOverflow(char* numberToCheck, int radix);
/*! \brief Checks if number can be numeral system radix for task 14
   \param intToCheck number to check.
 ^{\star} \return true if number can be numeral system radix for task 14
 * false - otherwise
bool RadixInputCheck(int intToCheck);
#endif //LAB1 TASK14 H
Листинг 2 – Код в файле task14.c
/*! \file
            input.c
 * \brief Implements functions of task14.h
#include "task14.h"
#include <math.h>
#include <string.h>
#include <stdbool.h>
#include <stdio.h>
/*! \enum
 * \brief Essential constants for task 14
enum NumeralSystemsConstants
    VIGESIMAL A = 'A', /** Digit next to 9 */
   MIN_RADIX = 2, /** Minimal numeral system radix */
MAX_RADIX = 20 /** Maximal numeral system radix for
                      /** Maximal numeral system radix for task */
void PerformTask(taskData* data)
    char reversedNumber[INPUT SIZE];
    char* number = data->number;
    int8 t radix = data->radix;
    for (int i = (int) strlen(number) - 1; i \ge 0; i--)
        reversedNumber[strlen(number) - (i + 1)] = number[i];
```

```
reversedNumber[strlen(number)] = '\0';
    while (reversedNumber[strlen(reversedNumber) - 1] == '0')
        reversedNumber[strlen(reversedNumber) - 1] = '\0';
    printf("Original: %s\n", number);
    printf("To decimal: %d\n",
           AnyNumeralSystemToDecimal(number, radix));
    printf("Reversed: %s\n", reversedNumber);
    if (CheckIntOverflow(reversedNumber, radix))
    {
        printf("Reversed to decimal: %d\n",
               AnyNumeralSystemToDecimal(reversedNumber, radix));
    }
    else
        printf("Reversed number is too big");
    }
}
int AnyNumeralSystemToDecimal(char* number, int radix)
    int result = 0;
    int multiplier = 1;
    int currentDigit;
    for (int i = (int) strlen(number) - 1; i \ge 0; i--)
        if (number[i] >= VIGESIMAL A)
            currentDigit = 10 + number[i] - VIGESIMAL A;
        }
        else
            currentDigit = number[i] - '0';
        result += currentDigit * multiplier;
        multiplier *= radix;
    return result;
}
bool CheckRadixMatch(char* numberToCheck, int radix)
    int currentDigit;
    for (int i = 0; i < strlen(numberToCheck); i++)</pre>
        if (numberToCheck[i] >= VIGESIMAL A)
            currentDigit = 10 + numberToCheck[i] - VIGESIMAL A;
        }
        else
            currentDigit = numberToCheck[i] - '0';
        if (currentDigit >= radix || currentDigit < 0)</pre>
```

Окончание листинга 2

```
return false;
        }
    }
   return true;
}
bool CheckIntOverflow(char* numberToCheck, int radix)
   return (double) strlen(numberToCheck) <</pre>
           (log((double) INT MAX ) / log((double) radix) - 1);
bool RadixInputCheck(int intToCheck)
    if (intToCheck < MIN RADIX || intToCheck > MAX RADIX)
       return false;
   return true;
}
Листинг 3 – Код в файле server.c
/*! \file
           server.c
 * \brief Code of server executable and server's task
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <unistd.h>
#include <signal.h>
#include "task14.h"
/*! \brief Catches ctrl+C signal, closes socket and terminates server
 * \param signum caught signal
   \param socketToClose descriptor of socket to close before terminating
void serverKiller(int signum, int socketToClose) {
   printf("Caught signal %d\n", signum);
    if(signum == SIGINT)
        printf("Terminating server\n");
       close(socketToClose);
       exit(signum);
   }
}
/*! \brief Reads data from socket and calls PerformTask()
   \param serverSocket descriptor of socket to listen
int serverTask(int serverSocket)
```

```
struct sockaddr_in clientName;
   socklen t clientNameLength = sizeof(clientName);
   taskData* data;
   data = (taskData*) malloc(sizeof(taskData));
   int recvResult = (int) recvfrom(serverSocket, data, sizeof(taskData),
                                    (struct sockaddr*) &clientName,
                                    &clientNameLength);
   if (-1 == recvResult)
       perror("recvfrom");
   if (recvResult > 0)
       PerformTask(data);
   free (data);
   return 0;
}
/*! \brief main function of server
int main(int argc, char* const argv[])
   if (argc < 2)
       fprintf(stderr, "Too few parameters.\n");
       return EXIT FAILURE;
   int socketFileDescriptor = -1;
   int portNumber = atoi(argv[1]);
   struct sockaddr in name;
   socketFileDescriptor = socket(AF INET, SOCK DGRAM, IPPROTO UDP);
   int i = 1;
   setsockopt(socketFileDescriptor, SOL SOCKET, SO REUSEADDR,
               (const char*) &i, sizeof(i)
   bzero((char*) &name, sizeof(name));
   name.sin_family = AF INET;
   name.sin port = htons((u short) portNumber);
   name.sin addr.s addr = INADDR ANY;
   if (-1 == bind(socketFileDescriptor, (const struct sockaddr*) &name,
                   sizeof(name)))
   {
       perror("bind ");
       close(socketFileDescriptor);
       exit(1);
   signal(SIGINT, (void*) serverKiller);
   {
        serverTask(socketFileDescriptor);
   } while (true);
```

Листинг 4 – Код в файле client.c

```
/*! \file client.c
 * \brief Code of client executable
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <unistd.h>
#include "task14.h"
/*! \brief Catches ctrl+C signal, closes socket and terminates server
 * \details Parses CL arguments, checks them and sends to the server
int main(int argc, const char* argv[])
    if (argc != 5)
        fprintf(stderr, "Expected arguments:\nServer address\nPort"
                        "number\nRadix (2-20)\nNumber (use \'A\' - \'J\' as"
                        "digits for >10-based systems\n");
        return EXIT FAILURE;
    }
    taskData* data;
   data = (taskData*) malloc(sizeof(taskData));
   char* strtolEndptr;
   data->radix = (int8 t) strtol(argv[3], &strtolEndptr, 10);
    if (*strtolEndptr != argv[3][strlen(argv[3])])
       printf("Wrong radix format!\n");
       return 0;
    }
    if (!RadixInputCheck(data->radix))
       printf("Wrong radix format!\n");
       return 0;
    strcpy(data->number, argv[4]);
    if (!(CheckIntOverflow(data->number, data->radix) &&
          CheckRadixMatch(data->number, data->radix)))
    {
       printf("Wrong number format!\n");
       return 0;
    int socketFileDescriptor;
    int portNumber = atoi(argv[2]);
    struct sockaddr in name;
   memset((char*) &name, 0, sizeof(name));
    name.sin family = AF INET;
    name.sin_addr.s_addr = inet_addr(argv[1]);
    if (INADDR_NONE == name.sin_addr.s_addr)
    {
       perror("inet addr");
```

Окончание листинга 4

```
exit(1);
    }
    name.sin port = htons((u short) portNumber);
    socketFileDescriptor = socket(AF INET, SOCK DGRAM, IPPROTO UDP);
    if (socketFileDescriptor < 0)</pre>
       perror("socket");
        exit(1);
    }
    int resSend;
    resSend = (int) sendto(socketFileDescriptor, data, sizeof(taskData), 0,
                           (struct sockaddr*) &name, sizeof(name));
    if (0 > resSend)
       perror("sendto");
       exit(1);
    close(socketFileDescriptor);
    free (data);
    return 0;
Листинг 5 – код в файле input.h
/*! \file
            input.h
 * \brief Header containing essential input constants
#include <stdbool.h>
#ifndef LAB1 INPUT H
#define LAB1 INPUT H
/*! \enum
 * \brief Size of string for input
enum Sizes
    INPUT SIZE = 200
};
#endif //LAB1_INPUT_H
```

4 Содержимое скрипта configure

На следующем листинге приведено содержимое скрипта configure.

Листинг 6 – Код в файле configure

```
#! /bin/sh
# Guess values for system-dependent variables and create Makefiles.
# Generated by GNU Autoconf 2.69 for FULL-PACKAGE-NAME VERSION.
# Report bugs to <BUG-REPORT-ADDRESS>.
# Copyright (C) 1992-1996, 1998-2012 Free Software Foundation, Inc.
# This configure script is free software; the Free Software Foundation
# gives unlimited permission to copy, distribute and modify it.
## ----- ##
## M4sh Initialization. ##
## ----- ##
# Be more Bourne compatible
DUALCASE=1; export DUALCASE # for MKS sh
if test -n "{ZSH_VERSION+set}" && (emulate sh) >/dev/null 2>&1; then :
 emulate sh
 NULLCMD=:
  # Pre-4.2 versions of Zsh do word splitting on ${1+"$@"}, which
  # is contrary to our usage. Disable this feature.
 alias -g '${1+"$@"}'='"$@"'
 setopt NO GLOB SUBST
else
 case `(set -o) 2>/dev/null` in #(
 *posix*) :
   set -o posix ;; #(
  *):
    ;;
esac
fi
as nl='
export as nl
```

```
# Printing a long string crashes Solaris 7 /usr/bin/printf.
as echo=$as echo$as echo$as echo$as echo
as echo=$as echo$as echo$as echo$as echo$as echo$as echo
# Prefer a ksh shell builtin over an external printf program on Solaris,
# but without wasting forks for bash or zsh.
if test -z "$BASH VERSION$ZSH VERSION" \
   && (test "X`print -r -- as_echo'' = "X$as_echo'') 2>/dev/null; then
 as echo='print -r --'
 as echo n='print -rn --'
elif (test "X`printf %s $as echo`" = "X$as echo") 2>/dev/null; then
 as echo='printf %s\n'
 as echo n='printf %s'
else
 if test "X`(/usr/ucb/echo -n -n as echo) 2>/dev/null`" = "X-n <math>as echo"; then
   as echo body='eval /usr/ucb/echo -n "$1$as nl"'
   as echo n='/usr/ucb/echo -n'
 else
   as echo body='eval expr "X1": "X\(.*\\\)"'
   as echo n body='eval
     arg=$1;
     case $arg in #(
     *"$as nl"*)
     expr "X$arg" : "X\\(.*\\)$as nl";
     arg=`expr "X$arg" : ".*$as nl\\(.*\\)"`;;
     expr "X$arg" : "X\\(.*\\)" | tr -d "$as nl"
   export as echo n body
   as echo n='sh -c $as echo n body as echo'
 fi
 export as echo body
 as echo='sh -c $as echo body as echo'
fi
# The user is always right.
if test "${PATH SEPARATOR+set}" != set; then
 PATH SEPARATOR=:
  (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
    (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
```

```
PATH SEPARATOR=';'
 }
fi
# IFS
# We need space, tab and new line, in precisely that order. Quoting is
# there to prevent editors from complaining about space-tab.
# (If AS PATH WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" ""
         $as nl"
# Find who we are. Look in the path if we contain no directory separator.
as myself=
case $0 in #((
  *[\]' ) as myself=$0 ;;
  *) as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
  IFS=$as save IFS
  test -z "$as_dir" && as_dir=.
    test -r "$as dir/$0" && as myself=$as dir/$0 && break
  done
IFS=$as save IFS
     ;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as myself" = x; then
 as myself=$0
fi
if test ! -f "$as myself"; then
  $as echo "$as myself: error: cannot find myself; rerun with an absolute file
name" >&2
  exit 1
fi
# Unset variables that we do not need and which cause bugs (e.g. in
\# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "\|\cdot\| exit 1"
# suppresses any "Segmentation fault" message there. '((' could
```

```
# trigger a bug in pdksh 5.2.14.
for as var in BASH ENV ENV MAIL MAILPATH
do eval test x\{$as var+set} = xset \
  && ( (unset $as var) || exit 1) >/dev/null 2>&1 && unset $as var || :
done
PS1='$ '
PS2='> '
PS4='+ '
# NLS nuisances.
LC ALL=C
export LC ALL
LANGUAGE=C
export LANGUAGE
# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH
# Use a proper internal environment variable to ensure we don't fall
  # into an infinite loop, continuously re-executing ourselves.
  if test x"${_as_can_reexec}" != xno && test "x$CONFIG_SHELL" != x; then
    as can reexec=no; export as can reexec;
    # We cannot yet assume a decent shell, so we have to provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH ENV=/dev/null
ENV=/dev/null
(unset BASH ENV) >/dev/null 2>&1 && unset BASH ENV ENV
case $- in # ((((
  *v*x* | *x*v*) as opts=-vx;
 *v* ) as opts=-v ;;
 *x* ) as opts=-x ;;
  * ) as opts= ;;
exec $CONFIG SHELL $as opts "$as myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec'.
$as echo "$0: could not re-execute with $CONFIG SHELL" >&2
as fn exit 255
  fi
```

```
# We don't want this to propagate to other subprocesses.
          { as can reexec=; unset as can reexec;}
if test "x$CONFIG SHELL" = x; then
  as bourne compatible="if test -n \"\${ZSH VERSION+set}\" && (emulate sh)
>/dev/null 2>&1; then :
  emulate sh
  NULLCMD=:
  # Pre-4.2 versions of Zsh do word splitting on \S{1+\"\S\emptyset\"}, which
  # is contrary to our usage. Disable this feature.
 alias -q '\\{1+\"\\{0\}\"}'='\"\\{0\}\"'
 setopt NO GLOB SUBST
else
  case \`(set -o) 2>/dev/null\` in #(
  *posix*) :
   set -o posix ;; #(
  *):
    ;;
esac
fi
  as required="as fn return () { (exit \$1); }
as fn success () { as fn return 0; }
as fn failure () { as fn return 1; }
as fn ret success () { return 0; }
as fn ret failure () { return 1; }
exitcode=0
as fn success || { exitcode=1; echo as fn success failed.; }
as fn failure && { exitcode=1; echo as fn failure succeeded.; }
as fn ret success || { exitcode=1; echo as fn ret success failed.; }
as fn ret failure && { exitcode=1; echo as fn ret failure succeeded.; }
if ( set x; as fn ret success y && test x = \"\); then :
else
  exitcode=1; echo positional parameters were not saved.
fi
test x\$exitcode = x0 \mid \mid exit 1
test -x / || exit 1"
  as suggested="
as lineno 1=";as suggested=$as suggested$LINENO;as suggested=$as suggested"
as lineno 1a=\$LINENO
```

```
as lineno 2=";as suggested=$as suggested$LINENO;as suggested=$as suggested"
as lineno 2a=\$LINENO
  eval 'test \"x\$as lineno 1'\$as run'\" != \"x\$as lineno 2'\$as run'\" &&
  test \"x\`expr \$as lineno 1'\\$as run' + 1\`\" = \"x\\$as lineno 2'\\$as run'\"'
| |  exit 1
test \((1 + 1)) = 2 || exit 1"
  if (eval "$as required") 2>/dev/null; then :
 as have required=yes
  as have required=no
fi
  if test x$as have required = xyes && (eval "$as suggested") 2>/dev/null; then :
else
  as save IFS=$IFS; IFS=$PATH SEPARATOR
as found=false
for as dir in /bin$PATH SEPARATOR/usr/bin$PATH SEPARATOR$PATH
  IFS=$as save IFS
  test -z "$as dir" && as_dir=.
  as found=:
  case $as dir in #(
       /*)
         for as base in sh bash ksh sh5; do
           # Try only shells that exist, to save several forks.
           as shell=$as dir/$as base
           if { test -f "$as_shell" || test -f "$as_shell.exe"; } &&
                { $as echo "$as bourne compatible""$as required" | as run=a
"$as shell"; } 2>/dev/null; then :
  CONFIG SHELL=$as shell as have required=yes
               if { $as echo "$as bourne compatible""$as suggested" | as run=a
"$as shell"; } 2>/dev/null; then :
 break 2
fi
fi
        done;;
       esac
 as_found=false
$as found || { if { test -f "$SHELL" || test -f "$SHELL.exe"; } &&
```

```
{ $as echo "$as bourne compatible" "$as required" | as run=a "$SHELL";
} 2>/dev/null; then :
  CONFIG SHELL=$SHELL as have required=yes
fi; }
IFS=$as save IFS
      if test "x$CONFIG SHELL" != x; then :
  export CONFIG_SHELL
             # We cannot yet assume a decent shell, so we have to provide a
# neutralization value for shells without unset; and this also
# works around shells that cannot unset nonexistent variables.
# Preserve -v and -x to the replacement shell.
BASH ENV=/dev/null
ENV=/dev/null
(unset BASH ENV) >/dev/null 2>&1 && unset BASH_ENV ENV
case $- in # ((((
  *v*x* | *x*v* ) as opts=-vx ;;
  *v* ) as opts=-v ;;
  *x* ) as opts=-x ;;
  * ) as opts= ;;
exec $CONFIG SHELL $as opts "$as myself" ${1+"$@"}
# Admittedly, this is quite paranoid, since all the known shells bail
# out after a failed `exec'.
$as echo "$0: could not re-execute with $CONFIG SHELL" >&2
exit 255
fi
    if test x$as have required = xno; then :
  $as echo "$0: This script requires a shell more modern than all"
  $as_echo "$0: the shells that I found on your system."
  if test x${ZSH VERSION+set} = xset ; then
    $as echo "$0: In particular, zsh $ZSH VERSION has bugs and should"
    $as echo "$0: be upgraded to zsh 4.3.4 or later."
  else
    $as echo "$0: Please tell bug-autoconf@gnu.org and BUG-REPORT-ADDRESS
$0: about your system, including any error possibly output
$0: before this message. Then install a modern shell, or
$0: manually run the script under such a shell if you do
$0: have one."
```

```
fi
 exit 1
fi
fi
fi
SHELL=${CONFIG_SHELL-/bin/sh}
export SHELL
# Unset more variables known to interfere with behavior of common tools.
CLICOLOR_FORCE= GREP_OPTIONS=
unset CLICOLOR FORCE GREP OPTIONS
## ----- ##
## M4sh Shell Functions. ##
## ----- ##
# as_fn_unset VAR
# -----
# Portably unset VAR.
as_fn_unset ()
  { eval $1=; unset $1;}
as unset=as fn unset
# as_fn_set_status STATUS
# -----
# Set $? to STATUS, without forking.
as_fn_set_status ()
{
 return $1
} # as_fn_set_status
# as_fn_exit STATUS
# -----
# Exit the shell with STATUS, even in a "trap 0" or "set -e" context.
as fn exit ()
{
 set +e
 as_fn_set_status $1
 exit $1
} # as fn exit
```

```
# as fn mkdir p
# -----
# Create "$as dir" as a directory, including parents if necessary.
as fn mkdir p ()
 case $as_dir in #(
 -*) as dir=./$as dir;;
 test -d "$as dir" || eval $as mkdir p || {
   as dirs=
   while :; do
     case $as dir in #(
     *\'*) as qdir=`$as echo "$as dir" | sed "s/'/'\\\\\''/g"`;; #'(
     *) as qdir=$as dir;;
     esac
     as_dirs="'$as_qdir' $as_dirs"
     as_dir=`$as_dirname -- "$as_dir" ||
$as expr X"$as dir" : 'X\(.*[^/]\)//*[^/][^/]*/*$' \| \
      X"$as_dir" : 'X\(//\)[^/]' \| \
      X"$as_dir" : 'X\(//\)$' \| \
      X"$as dir" : 'X\(/\)' \| . 2>/dev/null ||
$as echo X"$as dir" |
    sed '/^X\(.*[^/]\)\/\/*[^/][^/]*\/*$/{
         s//\1/
         q
        }
       /^X\(\/\\)[^/].*/{
         s//\1/
         q
       /^X\(\/\/)$/{
         s//\1/
         q
       /^X\(\/\).*/{
         s//\1/
         q
       s/.*/./; q'`
      test -d "$as dir" && break
```

```
done
    test -z "$as_dirs" || eval "mkdir $as_dirs"
  } || test -d "$as dir" || as fn error $? "cannot create directory $as dir"
} # as fn mkdir p
# as fn executable p FILE
# -----
# Test if FILE is an executable regular file.
as fn executable p ()
 test -f "$1" && test -x "$1"
} # as fn executable p
# as fn append VAR VALUE
# -----
# Append the text in VALUE to the end of the definition contained in VAR. Take
# advantage of any shell optimizations that allow amortized linear growth over
# repeated appends, instead of the typical quadratic growth present in naive
# implementations.
if (eval "as var=1; as var+=2; test x var = x12") 2/dev/null; then :
 eval 'as fn append ()
   eval $1+=\$2
  } '
else
 as_fn_append ()
   eval 1=\$1\$2
fi # as fn append
# as fn arith ARG...
# Perform arithmetic evaluation on the ARGs, and store the result in the
# global $as_val. Take advantage of shells that can avoid forks. The arguments
# must be portable across $(()) and expr.
if (eval "test \((1 + 1)) = 2") 2>/dev/null; then :
 eval 'as fn arith ()
   as val=$(( $* ))
```

```
else
 as fn arith ()
   as_val=`expr "$@" || test $? -eq 1`
fi # as_fn_arith
# as fn error STATUS ERROR [LINENO LOG FD]
# -----
# Output "`basename $0`: error: ERROR" to stderr. If LINENO and LOG FD are
# provided, also output the error to LOG FD, referencing LINENO. Then exit the
# script with STATUS, using 1 if that was 0.
as fn error ()
{
 as status=$1; test $as status -eq 0 && as status=1
 if test "$4"; then
   as lineno=${as lineno-"$3"} as lineno stack=as lineno stack=$as lineno stack
   $as echo "$as me:${as lineno-$LINENO}: error: $2" >&$4
  fi
  $as echo "$as me: error: $2" >&2
 as fn exit $as status
} # as fn error
if expr a : '\(a\)' >/dev/null 2>&1 &&
  test "X`expr 00001 : '.*\(...\)'`" = X001; then
 as_expr=expr
else
 as expr=false
fi
if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" = "X/"; then
 as_basename=basename
else
 as basename=false
fi
if (as dir=`dirname -- /` && test "X$as dir" = X/) >/dev/null 2>&1; then
 as dirname=dirname
else
```

```
as dirname=false
fi
as me=`$as basename -- "$0" ||
$as expr X/"$0" : '.*/\([^/][^/]*\)/*$' \| \
       X"$0" : 'X(//)$' | 
       X"$0" : 'X\(/\)' \| . 2>/dev/null ||
$as echo X/"$0" |
    sed '/^.* \/ ([^/][^/]* \) \/*$/{
          s//\1/
          q
        /^X\/\(\/\/\)$/{
         s//\1/
         q
        /^X\/\(\/\).*/{
         s//\1/
         q
        s/.*/./; q'`
# Avoid depending upon Character Ranges.
as_cr_letters='abcdefghijklmnopqrstuvwxyz'
as cr LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as cr Letters=$as cr letters$as cr LETTERS
as cr digits='0123456789'
as cr alnum=$as cr Letters$as cr digits
  as lineno 1=$LINENO as lineno 1a=$LINENO
  as lineno 2=$LINENO as lineno 2a=$LINENO
  eval 'test "x$as lineno 1'$as run'" != "x$as lineno 2'$as run'" &&
  test "x`expr $as_lineno_1'$as_run' + 1`" = "x$as lineno 2'$as run'"' || {
  # Blame Lee E. McMahon (1931-1989) for sed's syntax. :-)
  sed -n '
    /[$]LINENO/=
  ' <$as myself |
    sed '
      s/[$]LINENO.*/&-/
```

```
t lineno
     :lineno
     Ν
      s/[\$]LINENO\([^'\$as cr alnum'].*\n\)\(.*\)/2\1\2/
     t loop
      s/-\n.*//
    ' >$as me.lineno &&
 chmod +x "$as me.lineno" ||
    { $as echo "$as me: error: cannot create $as me.lineno; rerun with a POSIX
shell" >&2; as fn exit 1; }
  # If we had to re-execute with $CONFIG SHELL, we're ensured to have
  # already done that, so ensure we don't try to do so again and fall
  # in an infinite loop. This has already happened in practice.
  as can reexec=no; export as can reexec
  # Don't try to exec as it changes $[0], causing all sort of problems
  # (the dirname of $[0] is not the place where we might find the
  # original and so on. Autoconf is especially sensitive to this).
  . "./$as me.lineno"
  # Exit status is that of the last command.
 exit
}
ECHO C= ECHO N= ECHO T=
case `echo -n x` in \#((((
-n*)
 case `echo 'xy\c'` in
 *c*) ECHO T=' ';;  # ECHO T is single tab character.
 echo `echo ksh88 bug on AIX 6.1` > /dev/null
      ECHO T=' ';;
 esac;;
*)
 ECHO N='-n';;
esac
rm -f conf$$ conf$$.exe conf$$.file
if test -d conf$$.dir; then
 rm -f conf$$.dir/conf$$.file
```

```
else
  rm -f conf$$.dir
 mkdir conf$$.dir 2>/dev/null
fi
if (echo >conf$$.file) 2>/dev/null; then
  if ln -s conf$$.file conf$$ 2>/dev/null; then
    as ln s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$.file conf$$.dir 2>/dev/null && test ! -f conf$$.exe ||
      as ln s='cp -pR'
  elif ln conf$$.file conf$$ 2>/dev/null; then
   as ln s=ln
  else
   as ln s='cp -pR'
  fi
else
  as ln s='cp -pR'
fi
rm -f conf$$ conf$$.exe conf$$.dir/conf$$.file conf$$.file
rmdir conf$$.dir 2>/dev/null
if mkdir -p . 2>/dev/null; then
  as mkdir p='mkdir -p "$as dir"'
else
  test -d ./-p && rmdir ./-p
 as mkdir p=false
fi
as test x='test -x'
as executable p=as fn executable p
# Sed expression to map a string onto a valid CPP name.
as_tr_cpp="eval sed 'y%*$as_cr_letters%P$as_cr_LETTERS%;s%[^_$as_cr_alnum]%_%g'"
# Sed expression to map a string onto a valid variable name.
as tr sh="eval sed 'y%*+%pp%;s%[^ $as cr alnum]% %g'"
```

```
test -n "$DJDIR" || exec 7<&0 </dev/null
exec 6>&1
# Name of the host.
# hostname on some systems (SVR3.2, old GNU/Linux) returns a bogus exit status,
# so uname gets run too.
ac_hostname=`(hostname || uname -n) 2>/dev/null | sed 1q`
# Initializations.
ac_default_prefix=/usr/local
ac clean files=
ac config libobj dir=.
LIBOBJS=
cross compiling=no
subdirs=
MFLAGS=
MAKEFLAGS=
# Identity of this package.
PACKAGE NAME='FULL-PACKAGE-NAME'
PACKAGE TARNAME='full-package-name'
PACKAGE VERSION='VERSION'
PACKAGE STRING='FULL-PACKAGE-NAME VERSION'
PACKAGE BUGREPORT='BUG-REPORT-ADDRESS'
PACKAGE_URL=''
ac unique file="task14.c"
# Factoring default headers for most tests.
ac includes default="\
#include <stdio.h>
#ifdef HAVE SYS TYPES H
# include <sys/types.h>
#endif
#ifdef HAVE_SYS_STAT_H
# include <sys/stat.h>
#endif
#ifdef STDC HEADERS
# include <stdlib.h>
# include <stddef.h>
```

```
#else
# ifdef HAVE_STDLIB_H
# include <stdlib.h>
# endif
#endif
#ifdef HAVE_STRING_H
# if !defined STDC_HEADERS && defined HAVE_MEMORY_H
# include <memory.h>
# endif
# include <string.h>
#endif
#ifdef HAVE_STRINGS_H
# include <strings.h>
#endif
#ifdef HAVE_INTTYPES_H
# include <inttypes.h>
#endif
#ifdef HAVE_STDINT_H
# include <stdint.h>
#endif
#ifdef HAVE_UNISTD_H
# include <unistd.h>
#endif"
ac_subst_vars='LTLIBOBJS
LIBOBJS
EGREP
GREP
CPP
OBJEXT
EXEEXT
ac_ct_CC
CPPFLAGS
LDFLAGS
CFLAGS
CC
target alias
host alias
build_alias
LIBS
ECHO T
```

```
ECHO N
ECHO_C
DEFS
mandir
localedir
libdir
psdir
pdfdir
dvidir
htmldir
infodir
docdir
oldincludedir
includedir
runstatedir
localstatedir
sharedstatedir
sysconfdir
datadir
datarootdir
libexecdir
sbindir
bindir
program_transform_name
prefix
exec prefix
PACKAGE_URL
PACKAGE BUGREPORT
PACKAGE STRING
PACKAGE_VERSION
PACKAGE TARNAME
PACKAGE_NAME
PATH SEPARATOR
SHELL'
ac subst files=''
ac_user_opts='
enable option checking
      ac_precious_vars='build_alias
host alias
target_alias
```

```
CC
CFLAGS
LDFLAGS
LIBS
CPPFLAGS
CPP'
# Initialize some variables set by options.
ac init help=
ac init version=false
ac unrecognized opts=
ac unrecognized sep=
# The variables have the same names as the options, with
# dashes changed to underlines.
cache file=/dev/null
exec prefix=NONE
no create=
no recursion=
prefix=NONE
program prefix=NONE
program suffix=NONE
program transform name=s,x,x,
silent=
site=
srcdir=
verbose=
x includes=NONE
x libraries=NONE
# Installation directory options.
# These are left unexpanded so users can "make install exec_prefix=/foo"
# and all the variables that are supposed to be based on exec prefix
# by default will actually change.
# Use braces instead of parens because sh, perl, etc. also accept them.
# (The list follows the same order as the GNU Coding Standards.)
bindir='${exec prefix}/bin'
sbindir='${exec prefix}/sbin'
libexecdir='${exec prefix}/libexec'
datarootdir='${prefix}/share'
datadir='${datarootdir}'
```

```
sysconfdir='${prefix}/etc'
sharedstatedir='${prefix}/com'
localstatedir='${prefix}/var'
runstatedir='${localstatedir}/run'
includedir='${prefix}/include'
oldincludedir='/usr/include'
docdir='${datarootdir}/doc/${PACKAGE TARNAME}'
infodir='${datarootdir}/info'
htmldir='${docdir}'
dvidir='${docdir}'
pdfdir='${docdir}'
psdir='${docdir}'
libdir='${exec prefix}/lib'
localedir='${datarootdir}/locale'
mandir='${datarootdir}/man'
ac prev=
ac dashdash=
for ac option
do
  # If the previous option needs an argument, assign it.
  if test -n "$ac prev"; then
   eval $ac prev=\$ac option
   ac prev=
    continue
  fi
  case $ac option in
  *=?*) ac optarg=`expr "X$ac option" : '[^=]*=\(.*\)'` ;;
  *=)
       ac optarg= ;;
  *)
        ac optarg=yes ;;
  esac
  # Accept the important Cygnus configure options, so we can diagnose typos.
  case $ac dashdash$ac option in
  --)
    ac dashdash=yes ;;
  -bindir | --bindir | --bindi | --bind | --bin
    ac prev=bindir ;;
```

```
-bindir=* | --bindir=* | --bindi=* | --bind=* | --bin=* | --bi=*)
   bindir=$ac optarg ;;
 -build | --build | --buil | --bu)
   ac prev=build alias ;;
 -build=* | --build=* | --buil=* | --bu=*)
   build alias=$ac optarg ;;
 -cache-file | --cache-fil | --cache-fi \
 ac prev=cache file ;;
 -cache-file=* | --cache-file=* | --cache-fil=* | --cache-fi=* \
 | --cache-f=* | --cache-=* | --cache=* | --cach=* | --cac=* | --ca=* | --c=*)
   cache file=$ac optarg ;;
 --config-cache | -C)
   cache file=config.cache ;;
 -datadir | --datadir | --datadi | --datad)
   ac prev=datadir ;;
 -datadir=* | --datadir=* | --datadi=* | --datad=*)
   datadir=$ac optarg ;;
 -datarootdir | --datarootdir | --datarootdi | --datarootd | --dataroot
 | --dataroo | --dataro | --datar)
   ac prev=datarootdir ;;
 -datarootdir=* | --datarootdir=* | --datarootdi=* | --datarootd=* \
  | --dataroot=* | --dataroo=* | --dataro=* | --datar=*)
   datarootdir=$ac optarg ;;
 -disable-* | --disable-*)
   ac useropt=`expr "x$ac option" : 'x-*disable-\(.*\)'`
   # Reject names that are not valid shell variable names.
   expr "x$ac useropt" : ".*[^-+. $as cr alnum]" >/dev/null &&
     as fn error $? "invalid feature name: $ac useropt"
   ac useropt orig=$ac useropt
   ac useropt=`$as echo "$ac useropt" | sed 's/[-+.]/ /g'`
   case $ac user opts in
"enable $ac useropt"
"*) ;;
```

```
ac unrecognized opts="$ac unrecognized opts$ac unrecognized sep--
disable-$ac useropt orig"
      ac unrecognized sep=', ';;
   esac
   eval enable $ac useropt=no ;;
 -docdir | --docdir | --docdi | --doc | --do)
   ac prev=docdir ;;
 -docdir=* | --docdir=* | --docdi=* | --doc=* | --do=*)
   docdir=$ac optarg ;;
 -dvidir | --dvidir | --dvidi | --dvid | --dv)
   ac prev=dvidir ;;
 -dvidir=* | --dvidir=* | --dvidi=* | --dvid=* | --dvi=* | --dv=*)
   dvidir=$ac optarg ;;
 -enable-* | --enable-*)
   ac_useropt=`expr "x$ac_option" : 'x-*enable-\([^=]*\)'`
   # Reject names that are not valid shell variable names.
   expr "x$ac_useropt" : ".*[^-+. $as cr alnum]" >/dev/null &&
     as fn error $? "invalid feature name: $ac useropt"
   ac useropt orig=$ac useropt
   ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
   case $ac user opts in
"enable $ac useropt"
"*) ;;
              ac unrecognized opts="$ac unrecognized opts$ac unrecognized sep--
enable-$ac useropt orig"
      ac unrecognized sep=', ';;
   esac
   eval enable $ac useropt=\$ac optarg ;;
 -exec-prefix | --exec_prefix | --exec-prefi \
  | --exec | --exe | --ex)
   ac prev=exec prefix ;;
 -exec-prefix=* | --exec prefix=* | --exec-prefix=* | --exec-prefi=* \
  | --exec-pref=* | --exec-pre=* | --exec-pr=* | --exec-p=* | --exec-=* \
  | --exec=* | --exe=* | --ex=*)
   exec prefix=$ac optarg ;;
```

```
-gas | --gas | --ga | --g)
  # Obsolete; use --with-gas.
 with gas=yes ;;
-help | --help | --hel | --he | -h)
 ac init help=long ;;
-help=r* | --help=r* | --hel=r* | --he=r* | -hr*)
 ac init help=recursive ;;
-help=s* | --help=s* | --hel=s* | --he=s* | -hs*)
 ac init help=short ;;
-host | --host | --hos | --ho)
  ac prev=host alias ;;
-host=* | --host=* | --hos=* | --ho=*)
 host alias=$ac optarg ;;
-htmldir | --htmldir | --htmldi | --html | --html | --htm | --ht)
 ac prev=htmldir ;;
-htmldir=* | --htmldir=* | --htmldi=* | --htmld=* | --html=* |
| --ht=*)
 htmldir=$ac optarg ;;
-includedir | --includedir | --includedi | --included | --include
| --includ | --inclu | --incl | --inc)
  ac prev=includedir ;;
-includedir=* | --includedir=* | --included=* | --included=* \
| --includ=* | --inclu=* | --incl=* | --inc=*)
 includedir=$ac optarg ;;
-infodir | --infodir | --infod | --info | --inf)
 ac prev=infodir ;;
-infodir=* | --infodir=* | --infodi=* | --infod=* | --info=* | --inf=*)
  infodir=$ac optarg ;;
-libdir | --libdir | --libdi | --libd)
 ac prev=libdir ;;
-libdir=* | --libdir=* | --libdi=* | --libd=*)
  libdir=$ac optarg ;;
-libexecdir | --libexecdir | --libexecd | --libexec \
```

```
| --libexe | --libex | --libe)
 ac prev=libexecdir ;;
-libexecdir=* | --libexecdir=* | --libexecd=* | --libexecd=* | --libexecd=* |
| --libexe=* | --libex=* | --libe=*)
 libexecdir=$ac optarg ;;
-localedir | --localedir | --localedi | --localed | --locale)
 ac prev=localedir ;;
-localedir=* | --localedir=* | --localed=* | --localed=*)
 localedir=$ac optarg ;;
-localstatedir | --localstatedir | --localstatedi | --localstated \
| --localstate | --localstat | --localsta | --localst | --locals)
 ac prev=localstatedir ;;
-localstatedir=* | --localstatedir=* | --localstatedi=* | --localstated=* \
| --localstate=* | --localstat=* | --localsta=* | --localst=* | --localst=*)
 localstatedir=$ac optarg ;;
-mandir | --mandir | --mandi | --mand | --man | --ma
 ac prev=mandir ;;
-mandir=* | --mandir=* | --mandi=* | --mand=* | --ma=* | --ma=* | --m=*)
 mandir=$ac optarg ;;
-nfp | --nfp | --nf)
 # Obsolete; use --without-fp.
 with fp=no ;;
-no-create | --no-creat | --no-crea | --no-cre \
| --no-cr | --no-c | -n)
 no create=yes ;;
-no-recursion | --no-recursio | --no-recursi \
no recursion=yes ;;
-oldincludedir | --oldincludedir | --oldincluded \
| --oldinclude | --oldinclud | --oldinclu | --oldincl | --oldinc \
| --oldin | --oldi | --old | --ol | --o)
 ac prev=oldincludedir ;;
-oldincludedir=* | --oldincludedir=* | --oldincludedi=* | --oldincluded=* \
| --oldinclude=* | --oldinclud=* | --oldinclu=* | --oldincl=* | --oldinc=* \
```

```
| --oldin=* | --oldi=* | --old=* | --ol=* | --o=*)
  oldincludedir=$ac optarg ;;
-prefix | --prefix | --prefi | --pref | --pre | --pr | --p)
  ac prev=prefix ;;
-prefix=* | --prefix=* | --prefi=* | --pref=* | --pre=* | --pr=* | --p=*)
 prefix=$ac optarg ;;
-program-prefix | --program-prefix | --program-prefi | --program-pref \
| --program-pre | --program-pr | --program-p)
 ac prev=program prefix ;;
-program-prefix=* | --program-prefix=* | --program-prefi=* \
| --program-pref=* | --program-pre=* | --program-pr=* | --program-p=*)
 program prefix=$ac optarg ;;
-program-suffix | --program-suffix | --program-suffi | --program-suff \
| --program-suf | --program-su | --program-s)
  ac prev=program suffix ;;
-program-suffix=* | --program-suffix=* | --program-suffi=* \
| --program-suff=* | --program-suf=* | --program-su=* | --program-s=*)
 program suffix=$ac optarg ;;
-program-transform-name | --program-transform-name \
| --program-transform-nam | --program-transform-na \
| --program-transform-n | --program-transform- \
| --program-transform | --program-transfor \
| --program-transfo | --program-transf \
| --program-trans | --program-tran \
| --progr-tra | --program-tr | --program-t)
  ac prev=program transform name ;;
-program-transform-name=* | --program-transform-name=* \
| --program-transform-nam=* | --program-transform-na=* \
| --program-transform-n=* | --program-transform-=* \
| --program-transform=* | --program-transfor=* \
| --program-transfo=* | --program-transf=* \
| --program-trans=* | --program-tran=* \
| --progr-tra=* | --program-tr=* | --program-t=*)
 program transform name=$ac optarg ;;
-pdfdir | --pdfdir | --pdfdi | --pdf | --pd)
  ac prev=pdfdir ;;
```

```
-pdfdir=* | --pdfdir=* | --pdfdi=* | --pdfd=* | --pdf=* | --pd=*)
 pdfdir=$ac optarg ;;
-psdir | --psdir | --psdi | --psd | --ps)
 ac prev=psdir ;;
-psdir=* | --psdir=* | --psdi=* | --psd=* | --ps=*)
 psdir=$ac optarg ;;
-q | -quiet | --quiet | --qui | --qu | --q \
| -silent | --silent | --silen | --sile | --sil)
 silent=yes ;;
-runstatedir | --runstatedir | --runstatedi | --runstated \
| --runstate | --runstat | --runsta | --runst | --runs
| --run | --ru | --r)
 ac prev=runstatedir ;;
-runstatedir=* | --runstatedir=* | --runstatedi=* | --runstated=* \
| --runstate=* | --runstat=* | --runsta=* | --runst=* | --runs=* |
| --run=* | --ru=* | --r=*)
 runstatedir=$ac optarg ;;
-sbindir | --sbindir | --sbindi | --sbind | --sbi | --sb)
  ac prev=sbindir ;;
-sbindir=* | --sbindir=* | --sbindi=* | --sbind=* | --sbin=* \
| --sbi=* | --sb=*)
 sbindir=$ac optarg ;;
-sharedstatedir | --sharedstatedir | --sharedstatedi \
| --shared
state | --shared
stat | --shared
sta \setminus
| --sharedst | --shared | --share | --shar \
| --sha | --sh)
 ac prev=sharedstatedir ;;
-sharedstatedir=* | --sharedstatedir=* | --sharedstatedi=* \
| --sharedstated=* | --sharedstate=* | --sharedstat=* | --sharedsta=* \
| --sharedst=* | --shared=* | --share=* | --share=* \
| --sha=* | --sh=*)
  sharedstatedir=$ac optarg ;;
-site | --site | --sit)
 ac prev=site ;;
-site=* | --site=* | --sit=*)
```

```
site=$ac optarg ;;
 -srcdir | --srcdir | --srcdi | --srcd | --src | --sr)
   ac prev=srcdir ;;
 -srcdir=* | --srcdir=* | --srcdi=* | --srcd=* | --src=* | --sr=*)
   srcdir=$ac optarg ;;
 -sysconfdir | --sysconfdir | --sysconfd | --sysconf \
 | --syscon | --sysco | --sys | --sy)
   ac prev=sysconfdir ;;
 -sysconfdir=* | --sysconfdir=* | --sysconfd=* | --sysconfd=* \
 | --syscon=* | --sysco=* | --sysc=* | --sys=* | --sy=*)
   sysconfdir=$ac optarg ;;
 -target | --target | --targe | --targ | --tar | --ta | --t)
   ac_prev=target alias ;;
 -target=* | --target=* | --targe=* | --targ=* | --tar=* | --ta=* | --t=*)
   target alias=$ac optarg ;;
 -v | -verbose | --verbose | --verbos | --verbo | --verb)
   verbose=yes ;;
 -version | --version | --versi | --vers | -V)
   ac init version=: ;;
 -with-* | --with-*)
   ac_useropt=`expr "xac_option" : 'x-*with-\([^=]*\)'`
   # Reject names that are not valid shell variable names.
   expr "x$ac useropt" : ".*[^-+. $as cr alnum]" >/dev/null &&
     as fn error $? "invalid package name: $ac useropt"
   ac useropt orig=$ac useropt
   ac_useropt=`$as_echo "$ac_useropt" | sed 's/[-+.]/_/g'`
   case $ac user opts in
"with $ac useropt"
"*) ;;
        ac unrecognized opts="$ac unrecognized opts$ac unrecognized sep--with-
$ac useropt orig"
      ac unrecognized sep=', ';;
   esac
   eval with $ac useropt=\$ac optarg ;;
```

```
-without-* | --without-*)
    ac_useropt=`expr "x$ac option" : 'x-*without-\(.*\)'`
    # Reject names that are not valid shell variable names.
   expr "x$ac useropt" : ".*[^-+. $as cr alnum]" >/dev/null &&
      as_fn_error $? "invalid package name: $ac useropt"
   ac useropt orig=$ac useropt
   ac useropt=`$as echo "$ac useropt" | sed 's/[-+.]/ /g'`
   case $ac_user_opts in
      * "
"with $ac useropt"
"*) ;;
               ac unrecognized opts="$ac unrecognized opts$ac unrecognized sep--
without-$ac useropt orig"
      ac unrecognized sep=', ';;
   esac
   eval with $ac useropt=no ;;
  --x)
    # Obsolete; use --with-x.
   with x=yes ;;
  -x-includes \mid --x-includes \mid --x-include \mid --x-includ \mid --x-inclu
  | --x-incl | --x-inc | --x-in | --x-i)
   ac prev=x includes ;;
  -x-includes=* | --x-includes=* | --x-include=* | --x-includ=* | --x-includ=* |
  | --x-incl=* | --x-inc=* | --x-in=* | --x-i=*)
   x includes=$ac optarg ;;
  -x-libraries | --x-libraries | --x-librarie | --x-librari \
  | --x-librar | --x-libra | --x-libr | --x-lib | --x-li | --x-l)
   ac prev=x libraries ;;
  -x-libraries=* | --x-libraries=* | --x-librarie=* | --x-librari=* \
  | --x-librar=* | --x-libra=* | --x-libr=* | --x-lib=* | --x-li=* | --x-l=*)
   x libraries=$ac optarg ;;
 -*) as fn error $? "unrecognized option: \`$ac option'
Try \`$0 --help' for more information"
   ;;
  *=*)
```

```
ac envvar='expr "x$ac option" : 'x\setminus([^-]*\setminus)='
    # Reject names that are not valid shell variable names.
    case $ac envvar in #(
     '' | [0-9]* | *[! $as cr alnum]* )
      as fn error $? "invalid variable name: \`$ac envvar'" ;;
    eval $ac envvar=\$ac optarg
    export $ac envvar ;;
  *)
    # FIXME: should be removed in autoconf 3.0.
    $as echo "$as me: WARNING: you should use --build, --host, --target" >&2
    expr "x$ac option" : ".*[^-. $as cr alnum]" >/dev/null &&
      $as echo "$as me: WARNING: invalid host type: $ac option" >&2
                  "${build alias=$ac option}
                                                          ${host alias=$ac option}
${target alias=$ac option}"
    ;;
 esac
done
if test -n "$ac prev"; then
 ac option=--`echo $ac_prev | sed 's/_/-/g'`
 as_fn_error $? "missing argument to $ac option"
fi
if test -n "$ac_unrecognized_opts"; then
 case $enable option checking in
   no) ;;
    fatal) as fn error $? "unrecognized options: $ac unrecognized opts" ;;
          $as echo "$as me: WARNING: unrecognized options: $ac unrecognized opts"
>&2 ;;
 esac
fi
# Check all directory arguments for consistency.
                  exec prefix prefix bindir sbindir libexecdir datarootdir \
for ac var in
            datadir sysconfdir sharedstatedir localstatedir includedir \
            oldincludedir docdir infodir htmldir dvidir pdfdir psdir \
            libdir localedir mandir runstatedir
do
```

```
eval ac val=\$$ac var
  # Remove trailing slashes.
  case $ac val in
   */)
      ac_val=`expr "X$ac_val" : 'X\(.*[^/]\)' \| "X$ac_val" : 'X\(.*\)'`
      eval $ac var=\$ac val;;
  esac
  # Be sure to have absolute directory names.
  case $ac_val in
    [\\/$]* | ?:[\\/]* ) continue;;
   NONE | '' ) case $ac var in *prefix ) continue;; esac;;
  esac
  as fn error $? "expected an absolute directory name for --$ac var: $ac val"
done
# There might be people who depend on the old broken behavior: `$host'
# used to hold the argument of --host etc.
# FIXME: To remove some day.
build=$build alias
host=$host_alias
target=$target alias
# FIXME: To remove some day.
if test "x$host alias" != x; then
  if test "x$build alias" = x; then
   cross compiling=maybe
 elif test "x$build_alias" != "x$host_alias"; then
   cross compiling=yes
  fi
fi
ac_tool_prefix=
test -n "$host alias" && ac tool prefix=$host alias-
test "$silent" = yes && exec 6>/dev/null
ac pwd=`pwd` && test -n "$ac pwd" &&
ac ls di=`ls -di .` &&
ac pwd ls di=`cd "$ac pwd" && ls -di .` ||
  as fn error $? "working directory cannot be determined"
```

```
test "X$ac ls di" = "X$ac pwd ls di" ||
  as_fn_error $? "pwd does not report name of working directory"
# Find the source files, if location was not specified.
if test -z "$srcdir"; then
  ac srcdir defaulted=yes
  # Try the directory containing this script, then the parent directory.
  ac_confdir=`$as_dirname -- "$as_myself" ||
$as expr X"$as myself" : 'X\(.*[^/]\)//*[^/][^/]*/*$' \| \
       X"$as myself" : 'X\(//\)[^/]' \| \
       X"$as myself" : 'X\setminus(//\setminus)$' \setminus| \setminus
       X"$as myself" : 'X\(/\)' \| . 2>/dev/null ||
$as echo X"$as_myself" |
    sed '/^X\(.*[^/]\) ///*[^/][^/]*//*$/{
          s//\1/
          q
        /^X\(\/\\)[^/].*/{
          s//\1/
          q
        /^X\(\/\/)$/{
          s//\1/
          q
        /^X\(\/\).*/{
          s//\1/
          q
        s/.*/./; q'`
  srcdir=$ac_confdir
  if test ! -r "$srcdir/$ac unique file"; then
    srcdir=..
  fi
else
  ac srcdir defaulted=no
if test ! -r "$srcdir/$ac unique file"; then
  test "$ac srcdir defaulted" = yes && srcdir="$ac confdir or .."
  as fn error $? "cannot find sources ($ac unique file) in $srcdir"
```

```
fi
ac msg="sources are in $srcdir, but \`cd $srcdir' does not work"
ac abs confdir=`(
     cd "$srcdir" && test -r "./$ac unique file" || as fn error $? "$ac msg"
# When building in place, set srcdir=.
if test "$ac abs confdir" = "$ac pwd"; then
  srcdir=.
# Remove unnecessary trailing slashes from srcdir.
# Double slashes in file names in object file debugging info
# mess up M-x gdb in Emacs.
case $srcdir in
*/) srcdir=`expr "X$srcdir" : 'X\(.*[^/]\)' \| "X$srcdir" : 'X\(.*\)'`;;
esac
for ac var in $ac precious vars; do
  eval ac env ${ac var} set=\${${ac var}+set}
  eval ac env ${ac var} value=\$${ac var}
 eval ac cv env \{ac var\} set=\{\{ac var\}+set\}}
  eval ac cv env ${ac var} value=\$${ac var}
done
# Report the --help message.
if test "$ac init help" = "long"; then
  # Omit some internal or obsolete options to make the list less imposing.
  \# This message is too long to be a string in the A/UX 3.1 sh.
  cat << ACEOF
\`configure' configures FULL-PACKAGE-NAME VERSION to adapt to many kinds of
systems.
Usage: $0 [OPTION]... [VAR=VALUE]...
To assign environment variables (e.g., CC, CFLAGS...), specify them as
VAR=VALUE. See below for descriptions of some of the useful variables.
Defaults for the options are specified in brackets.
Configuration:
  -h, --help
                         display this help and exit
```

--help=short display options specific to this package

--help=recursive display the short help of all the included packages

-C, --config-cache alias for \`--cache-file=config
-n, --no-create do not create output files

--srcdir=DIR find the sources in DIR [configure dir or \`..']

Installation directories:

--prefix=PREFIX install architecture-independent files in PREFIX

[\$ac_default_prefix]

--exec-prefix=EPREFIX install architecture-dependent files in EPREFIX

[PREFIX]

By default, \`make install' will install all the files in \`\$ac_default_prefix/bin', \`\$ac_default_prefix/lib' etc. You can specify an installation prefix other than \`\$ac_default_prefix' using \`--prefix', for instance \`--prefix=\\$HOME'.

For better control, use the options below.

Fine tuning of the installation directories:

--bindir=DIR user executables [EPREFIX/bin]

--sbindir=DIR system admin executables [EPREFIX/sbin]
--libexecdir=DIR program executables [EPREFIX/libexec]

--sysconfdir=DIR read-only single-machine data [PREFIX/etc]

--sharedstatedir=DIR modifiable architecture-independent data [PREFIX/com]

--localstatedir=DIR modifiable single-machine data [PREFIX/var]
--runstatedir=DIR modifiable per-process data [LOCALSTATEDIR/run]

--libdir=DIR object code libraries [EPREFIX/lib]

--oldincludedir=DIR C header files for non-gcc [/usr/include]

--datarootdir=DIR read-only arch.-independent data root [PREFIX/share]
--datadir=DIR read-only architecture-independent data [DATAROOTDIR]

--infodir=DIR info documentation [DATAROOTDIR/info]

--localedir=DIR locale-dependent data [DATAROOTDIR/locale]

--mandir=DIR man documentation [DATAROOTDIR/man]

--docdir=DIR documentation root

[DATAROOTDIR/doc/full-package-name]

--htmldir=DIR html documentation [DOCDIR]

```
--dvidir=DIR
                          dvi documentation [DOCDIR]
  --pdfdir=DIR
                         pdf documentation [DOCDIR]
                          ps documentation [DOCDIR]
  --psdir=DIR
ACEOF
 cat <<\ ACEOF
ACEOF
fi
if test -n "$ac init help"; then
  case $ac init help in
    short | recursive ) echo "Configuration of FULL-PACKAGE-NAME VERSION:";;
  esac
  cat <<\ ACEOF
Some influential environment variables:
  CC
             C compiler command
  CFLAGS
             C compiler flags
             linker flags, e.g. -L<lib dir> if you have libraries in a
  LDFLAGS
              nonstandard directory <lib dir>
             libraries to pass to the linker, e.g. -l<library>
  LIBS
             (Objective) C/C++ preprocessor flags, e.g. -I<include dir> if
  CPPFLAGS
              you have headers in a nonstandard directory <include dir>
              C preprocessor
  CPP
Use these variables to override the choices made by `configure' or to help
it to find libraries and programs with nonstandard names/locations.
Report bugs to <BUG-REPORT-ADDRESS>.
ACEOF
ac_status=$?
fi
if test "$ac init help" = "recursive"; then
  # If there are subdirs, report their specific --help.
  for ac dir in : $ac subdirs all; do test "x$ac dir" = x: && continue
    test -d "$ac dir" ||
      { cd "$srcdir" && ac pwd=`pwd` && srcdir=. && test -d "$ac dir"; } ||
      continue
    ac builddir=.
```

```
case "$ac dir" in
.) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;
*)
  ac dir suffix=/`\$as echo "\\$ac dir" | sed |s|^{...}
  # A ".." for each directory in $ac dir suffix.
  ac top builddir sub=`$as echo "$ac dir suffix" | sed 's|/[^\/]*|/..|g;s|/||'`
  case $ac top builddir sub in
  "") ac top builddir sub=. ac top build prefix= ;;
  *) ac_top_build_prefix=$ac_top_builddir_sub/ ;;
  esac ;;
esac
ac abs top builddir=$ac pwd
ac abs builddir=$ac pwd$ac dir suffix
# for backward compatibility:
ac top builddir=$ac top build prefix
case $srcdir in
  .) # We are building in place.
   ac srcdir=.
   ac_top_srcdir=$ac_top_builddir_sub
   ac abs top srcdir=$ac pwd ;;
  [\] * | ?:[\\/]* ) # Absolute name.
    ac srcdir=$srcdir$ac dir suffix;
   ac top srcdir=$srcdir
   ac abs top srcdir=$srcdir ;;
  *) # Relative name.
    ac_srcdir=$ac_top_build_prefix$srcdir$ac_dir_suffix
    ac top srcdir=$ac top build prefix$srcdir
   ac abs top srcdir=$ac pwd/$srcdir ;;
esac
ac abs srcdir=$ac abs top srcdir$ac dir suffix
    cd "$ac dir" || { ac status=$?; continue; }
    # Check for guested configure.
    if test -f "$ac srcdir/configure.gnu"; then
      echo &&
      $SHELL "$ac srcdir/configure.gnu" --help=recursive
    elif test -f "$ac srcdir/configure"; then
      $SHELL "$ac srcdir/configure" --help=recursive
    else
```

```
$as echo "$as me: WARNING: no configuration information is in $ac dir" >&2
    fi || ac status=$?
    cd "$ac pwd" || { ac status=$?; break; }
  done
fi
test -n "$ac init help" && exit $ac status
if $ac init version; then
 cat <<\_ACEOF
FULL-PACKAGE-NAME configure VERSION
generated by GNU Autoconf 2.69
Copyright (C) 2012 Free Software Foundation, Inc.
This configure script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it.
ACEOF
 exit
fi
## ----- ##
## Autoconf initialization. ##
## ----- ##
# ac fn c try compile LINENO
# -----
# Try to compile conftest. $ac ext, and return whether this succeeded.
ac_fn_c_try_compile ()
{
 as lineno=${as lineno-"$1"} as lineno stack=as lineno stack=$as lineno stack
 rm -f conftest.$ac objext
 if { ac try="$ac compile"
case "(($ac_try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac try echo=$ac try;;
eval ac_try_echo="\"\$as_me:${as_lineno-$LINENO}: $ac_try echo\""
$as echo "$ac try echo"; } >&5
 (eval "$ac compile") 2>conftest.err
 ac status=$?
  if test -s conftest.err; then
    grep -v '^ *+' conftest.err >conftest.er1
```

```
cat conftest.er1 >&5
   mv -f conftest.er1 conftest.err
  fi
  a = cho "$as me:${as lineno-$LINENO}: \$? = $ac status" >&5
  test $ac status = 0; } && {
      test -z "$ac c werror flag" ||
      test ! -s conftest.err
       } && test -s conftest.$ac objext; then :
  ac retval=0
else
  $as echo "$as me: failed program was:" >&5
sed 's/^/| /' conftest.$ac ext >&5
     ac retval=1
fi
  eval $as lineno stack; ${as lineno stack:+:} unset as lineno
 as fn set status $ac retval
} # ac fn c try compile
# ac_fn_c_try_link LINENO
# -----
# Try to link conftest.$ac_ext, and return whether this succeeded.
ac fn c try link ()
  as lineno=${as lineno-"$1"} as lineno stack=as lineno stack=$as lineno stack
 rm -f conftest.$ac_objext conftest$ac_exeext
 if { ac try="$ac link"
case "(($ac try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac try echo=$ac try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
  (eval "$ac link") 2>conftest.err
 ac status=$?
  if test -s conftest.err; then
   grep -v '^ *+' conftest.err >conftest.er1
   cat conftest.er1 >&5
   mv -f conftest.er1 conftest.err
  fi
```

```
$as echo "$as me:${as lineno-$LINENO}: \$? = $ac status" >&5
  test $ac status = 0; } && {
      test -z "$ac c werror flag" ||
      test ! -s conftest.err
       } && test -s conftest$ac_exeext && {
      test "$cross compiling" = yes ||
      test -x conftest$ac exeext
       }; then :
  ac retval=0
else
  $as echo "$as me: failed program was:" >&5
sed 's/^/| /' conftest.$ac ext >&5
     ac retval=1
fi
  # Delete the IPA/IPO (Inter Procedural Analysis/Optimization) information
  # created by the PGI compiler (conftest ipa8 conftest.oo), as it would
  # interfere with the next link command; also delete a directory that is
  # left behind by Apple's compiler. We do this before executing the actions.
  rm -rf conftest.dSYM conftest ipa8 conftest.oo
  eval $as lineno stack; ${as lineno stack:+:} unset as lineno
  as fn set status $ac retval
} # ac fn c try_link
# ac fn c try cpp LINENO
# -----
# Try to preprocess conftest.$ac ext, and return whether this succeeded.
ac fn c try cpp ()
  as lineno=${as lineno-"$1"} as lineno stack=as lineno stack=$as lineno stack
  if { ac try="$ac cpp conftest.$ac ext"
case "(($ac try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac try echo=$ac try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
  (eval "$ac cpp conftest.$ac ext") 2>conftest.err
 ac status=$?
  if test -s conftest.err; then
```

```
grep -v '^ *+' conftest.err >conftest.er1
   cat conftest.er1 >&5
   mv -f conftest.er1 conftest.err
 fi
  as echo "as me:{as lineno-$LINENO}: \$? = $ac status" >&5
 test $ac status = 0; } > conftest.i && {
      test -z "$ac c preproc warn flag$ac c werror flag" ||
      test ! -s conftest.err
      }; then :
 ac retval=0
else
 $as echo "$as me: failed program was:" >&5
sed 's/^/| /' conftest.$ac ext >&5
   ac retval=1
fi
 eval $as lineno stack; ${as lineno stack:+:} unset as lineno
 as fn set status $ac retval
} # ac fn c try cpp
# ac fn c check header mongrel LINENO HEADER VAR INCLUDES
# -----
# Tests whether HEADER exists, giving a warning if it cannot be compiled using
# the include files in INCLUDES and setting the cache variable VAR
# accordingly.
ac_fn_c_check_header_mongrel ()
 as lineno=${as lineno-"$1"} as lineno stack=as lineno stack=$as lineno stack
 if eval \S {$3+:} false; then :
 { $as echo "$as me:{as lineno-$LINENO}: checking for $2" >&5
$as echo n "checking for $2... " >&6; }
if eval \${\$3+:} false; then :
 acceptant{$\ $as\ echo\ n\ "(cached)\ ">\&6}
fi
eval ac res=\$3
            { $as echo "$as me:${as lineno-$LINENO}: result: $ac res" >&5
$as echo "$ac res" >&6; }
else
  # Is the header compilable?
{ $as echo "$as me:${as lineno-$LINENO}: checking $2 usability" >&5
```

```
$as echo n "checking $2 usability... " >&6; }
cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
$4
#include <$2>
ACEOF
if ac fn c try compile "$LINENO"; then :
  ac header compiler=yes
  ac header compiler=no
fi
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
{ $as echo "$as me:${as lineno-$LINENO}: result: $ac header compiler" >&5
$as echo "$ac header compiler" >&6; }
# Is the header present?
{ $as echo "$as me:${as lineno-$LINENO}: checking $2 presence" >&5
$as echo n "checking $2 presence... " >&6; }
cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <$2>
ACEOF
if ac fn c try cpp "$LINENO"; then :
  ac header preproc=yes
else
  ac header preproc=no
rm -f conftest.err conftest.i conftest.$ac ext
{ $as echo "$as me:{as lineno-$LINENO}: result: $ac header preproc" >&5
$as echo "$ac header preproc" >&6; }
# So? What about this header?
case $ac header compiler: $ac header preproc: $ac c preproc warn flag in #((
  yes:no: )
    { $as echo "$as me:${as lineno-$LINENO}: WARNING: $2: accepted by the
compiler, rejected by the preprocessor!" >&5
$as echo "$as me: WARNING: $2: accepted by the compiler, rejected by the
preprocessor!" >&2;}
    { $as echo "$as me:${as lineno-$LINENO}: WARNING: $2: proceeding with the
compiler's result" >&5
$as echo "$as me: WARNING: $2: proceeding with the compiler's result" >&2;}
```

```
no:yes:* )
   { $as echo "$as me:${as lineno-$LINENO}: WARNING: $2: present but cannot be
compiled" >&5
$as echo "$as me: WARNING: $2: present but cannot be compiled" >&2;}
   { $as echo "$as me:${as lineno-$LINENO}: WARNING: $2: check for missing
prerequisite headers?" >&5
$as echo "$as me: WARNING: $2: check for missing prerequisite headers?" >&2;}
   { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: $2: see the Autoconf
documentation" >&5
$as echo "$as me: WARNING: $2: see the Autoconf documentation" >&2;}
   { $as echo "$as me:${as lineno-$LINENO}: WARNING: $2: section \"Present
But Cannot Be Compiled\"" >&5
$as echo "$as me: WARNING: $2: section \"Present But Cannot Be Compiled\""
>&2;}
   { $as echo "$as me:${as lineno-$LINENO}: WARNING: $2: proceeding with the
compiler's result" >&5
$as echo "$as me: WARNING: $2: proceeding with the compiler's result" >&2;}
( $as echo "## ----- ##
## Report this to BUG-REPORT-ADDRESS ##
## ----- ##"
    ) | sed "s/^/$as me: WARNING: /" >&2
   ;;
esac
 { $as echo "$as me:{as lineno-$LINENO}: checking for $2" >&5
$as echo n "checking for $2... " >&6; }
if eval \S {$3+:} false; then :
 else
 eval "$3=\$ac header compiler"
fi
eval ac res=\$3
            { $as echo "$as me:${as lineno-$LINENO}: result: $ac res" >&5
$as echo "$ac res" >&6; }
 eval $as lineno stack; ${as lineno stack:+:} unset as lineno
} # ac fn c check header mongrel
# ac fn c try run LINENO
# -----
```

```
# Try to link conftest. $ac ext, and return whether this succeeded. Assumes
# that executables *can* be run.
ac_fn_c_try_run ()
     as\_lineno=\$\{as\_lineno-"\$1"\}\ as\_lineno\_stack=as\_lineno\_stack=\$as\_lineno\ stack=\$as\_lineno\ stack=\$as
     if { ac try="$ac link"
case "(($ac try" in
     *\"* | *\`* | *\\*) ac try_echo=\$ac_try;;
      *) ac_try_echo=$ac_try;;
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
     (eval "$ac_link") 2>&5
     ac status=$?
     as echo "as me:{as lineno-$LINENO}: \$? = $ac status" >&5
     test $ac status = 0; } && { ac try='./conftest$ac exeext'
     { { case "(($ac try" in
     *\"* | *\`* | *\\*) ac try echo=\$ac try;;
      *) ac try echo=$ac try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
     (eval "$ac try") 2>&5
     ac status=$?
     a = cho "$as me:${as lineno-$LINENO}: \$? = $ac status" >&5
     test $ac status = 0; }; }; then :
     ac retval=0
else
      $as echo "$as me: program exited with status $ac status" >&5
                   $as echo "$as me: failed program was:" >&5
sed 's/^/| /' conftest.$ac ext >&5
                   ac retval=$ac status
fi
     rm -rf conftest.dSYM conftest ipa8 conftest.oo
     eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
     as fn set status $ac retval
} # ac fn c try run
# ac fn c check header compile LINENO HEADER VAR INCLUDES
```

```
# -----
# Tests whether HEADER exists and can be compiled using the include files in
# INCLUDES, setting the cache variable VAR accordingly.
ac fn c check header compile ()
 as lineno=${as lineno-"$1"} as lineno stack=as lineno stack=$as lineno stack
  { as echo "as me:{as lineno-$LINENO}: checking for $2" >&5
$as echo n "checking for $2... " >&6; }
if eval \S {$3+:} false; then :
  a echo n "(cached) " >&6
else
 cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
$4
#include <$2>
ACEOF
if ac fn c try compile "$LINENO"; then :
 eval "$3=yes"
else
 eval "$3=no"
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
eval ac res=\$3
            { $as echo "$as me:${as lineno-$LINENO}: result: $ac res" >&5
$as echo "$ac res" >&6; }
 eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
} # ac fn c check header compile
# ac fn c check type LINENO TYPE VAR INCLUDES
# -----
# Tests whether TYPE exists after having included INCLUDES, setting cache
# variable VAR accordingly.
ac fn c check type ()
{
 as lineno=${as lineno-"$1"} as lineno stack=as lineno stack=$as lineno stack
  { $as echo "$as me:{as lineno-$LINENO}: checking for $2" >&5
$as echo n "checking for $2... " >&6; }
if eval \S {$3+:} false; then :
  a echo n "(cached) " >&6
```

```
else
 eval "$3=no"
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
$4
int
main ()
{
if (sizeof ($2))
     return 0;
return 0;
}
ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
 cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
$4
int
main ()
if (sizeof (($2)))
        return 0;
 return 0;
_ACEOF
if ac fn c try compile "$LINENO"; then :
else
 eval "$3=yes"
fi
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
fi
eval ac res=\$3
             { $as echo "$as me:${as lineno-$LINENO}: result: $ac res" >&5
$as echo "$ac res" >&6; }
  eval $as lineno stack; ${as lineno stack:+:} unset as lineno
```

```
} # ac fn c check type
# ac fn c find intX t LINENO BITS VAR
# -----
# Finds a signed integer type with width BITS, setting cache variable VAR
# accordingly.
ac fn c find intX t ()
 as_lineno=${as_lineno-"$1"} as_lineno_stack=as_lineno_stack=$as_lineno_stack
 { $as echo "$as me:{as lineno-$LINENO}: checking for int$2 t" >&5
$as echo n "checking for int$2 t... " >&6; }
if eval \S {$3+:} false; then :
  a echo n "(cached) " >&6
else
 eval "$3=no"
     # Order is important - never check a type that is potentially smaller
     # than half of the expected target width.
     for ac type in int$2 t 'int' 'long int' \
       'long long int' 'short int' 'signed char'; do
       cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
$ac includes default
          enum { N = \$2 / 2 - 1 };
int
main ()
static int test_array [1 - 2 * !(0 < (ac_type) (((((ac_type) 1 << N) << N) - 1)
* 2 + 1))];
test array [0] = 0;
return test array [0];
 ;
 return 0;
}
ACEOF
if ac fn c try compile "$LINENO"; then :
 cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
$ac includes default
             enum { N = \$2 / 2 - 1 };
int
```

```
main ()
static int test_array [1 - 2 * !(($ac_type) ((((($ac_type) 1 << N) << N) - 1) *
2 + 1)
            < ($ac type) ((((($ac type) 1 << N) << N) - 1) * 2 + 2))];
test array [0] = 0;
return test array [0];
 return 0;
}
ACEOF
if ac fn c try compile "$LINENO"; then :
else
 case $ac type in #(
 int$2_t) :
   eval "$3=yes" ;; #(
 *) :
   eval "$3=\$ac_type" ;;
esac
fi
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
fi
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
       if eval test \"x\$"\$3"\" = x"no"; then :
else
 break
fi
    done
fi
eval ac_res=\$$3
            { $as echo "$as me:${as lineno-$LINENO}: result: $ac res" >&5
$as echo "$ac res" >&6; }
 eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
} # ac fn c find intX t
# ac fn c check func LINENO FUNC VAR
# -----
```

```
# Tests whether FUNC exists, setting the cache variable VAR accordingly
ac fn c check func ()
 as lineno=${as lineno-"$1"} as lineno stack=as lineno stack=$as lineno stack
 { as echo "as me:{as lineno-$LINENO}: checking for $2" >&5
$as echo n "checking for $2... " >&6; }
if eval \S {$3+:} false; then :
 a echo n "(cached) " >&6
 cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
/* Define $2 to an innocuous variant, in case <limits.h> declares $2.
  For example, HP-UX 11i <limits.h> declares gettimeofday. */
#define $2 innocuous $2
/* System header to define stub macros and hopefully few prototypes,
   which can conflict with char $2 (); below.
   Prefer <limits.h> to <assert.h> if STDC is defined, since
   <limits.h> exists even on freestanding compilers. */
#ifdef STDC
# include <limits.h>
#else
# include <assert.h>
#endif
#undef $2
/* Override any GCC internal prototype to avoid an error.
  Use char because int might match the return type of a GCC
  builtin and then its argument prototype would still apply. */
#ifdef cplusplus
extern "C"
#endif
char $2 ();
/* The GNU C library defines this for functions which it implements
   to always fail with ENOSYS. Some functions are actually named
   something starting with and the normal name is an alias. */
#if defined stub $2 || defined stub $2
choke me
#endif
```

```
int
main ()
return $2 ();
 return 0;
ACEOF
if ac fn c try link "$LINENO"; then :
 eval "$3=yes"
else
  eval "$3=no"
rm -f core conftest.err conftest.$ac objext \
    conftest$ac exeext conftest.$ac ext
fi
eval ac res=\$3
             { $as echo "$as me:{as lineno-$LINENO}: result: $ac res" >&5
$as echo "$ac res" >&6; }
  eval $as_lineno_stack; ${as_lineno_stack:+:} unset as_lineno
} # ac_fn_c_check_func
cat >config.log << ACEOF</pre>
This file contains any messages produced by compilers while
running configure, to aid debugging if configure makes a mistake.
It was created by FULL-PACKAGE-NAME $as me VERSION, which was
generated by GNU Autoconf 2.69. Invocation command line was
  $ $0 $@
ACEOF
exec 5>>config.log
cat << ASUNAME
## ----- ##
## Platform. ##
## ----- ##
hostname = `(hostname || uname -n) 2>/dev/null | sed 1q`
```

```
uname -m = `(uname -m) 2 > /dev/null || echo unknown`
uname -r = `(uname -r) 2 > /dev/null || echo unknown`
uname -s = `(uname -s) 2 > /dev/null || echo unknown`
uname -v = `(uname -v) 2 > /dev/null || echo unknown`
/usr/bin/uname -p = `(/usr/bin/uname -p) 2>/dev/null || echo unknown`
/bin/uname -X = `(/bin/uname -X) 2>/dev/null || echo unknown`
/bin/arch
                     = `(/bin/arch) 2>/dev/null
                                                             || echo unknown`
/usr/bin/arch -k = (/usr/bin/arch -k) 2>/dev/null
                                                            || echo unknown`
/usr/convex/getsysinfo = `(/usr/convex/getsysinfo) 2>/dev/null || echo unknown`
/usr/bin/hostinfo = `(/usr/bin/hostinfo) 2>/dev/null
                                                           || echo unknown`
/bin/machine
                     = `(/bin/machine) 2>/dev/null
                                                            || echo unknown`
/usr/bin/oslevel = `(/usr/bin/oslevel) 2>/dev/null
                                                            || echo unknown`
/bin/universe
                    = `(/bin/universe) 2>/dev/null
                                                            || echo unknown`
ASUNAME
as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
 IFS=$as save IFS
 test -z "$as dir" && as dir=.
   $as echo "PATH: $as dir"
 done
IFS=$as save IFS
} >&5
cat >&5 << ACEOF
## ---- ##
## Core tests. ##
## ---- ##
ACEOF
# Keep a trace of the command line.
# Strip out --no-create and --no-recursion so they do not pile up.
```

```
# Strip out --silent because we don't want to record it for future runs.
# Also quote any args containing shell meta-characters.
# Make two passes to allow for proper duplicate-argument suppression.
ac configure args=
ac configure args0=
ac configure args1=
ac must keep next=false
for ac pass in 1 2
do
  for ac arg
  do
    case $ac arg in
    -no-create | --no-c* | -n | -no-recursion | --no-r*) continue ;;
    -q | -quiet | --quiet | --qui | --qu | --q \
    | -silent | --silent | --silen | --sile | --sil)
     continue ;;
    *\'*)
      ac arg=`$as echo "$ac arg" | sed "s/'/'\\\\\''/g"` ;;
    esac
    case $ac pass in
    1) as_fn_append ac_configure_args0 " '$ac_arg'" ;;
      as fn append ac configure args1 " '$ac arg'"
      if test $ac must keep next = true; then
     ac must keep next=false # Got value, back to normal.
      else
     case $ac_arg in
        *=* | --config-cache | -C | -disable-* | --disable-* \
        | -enable-* | --enable-* | -gas | --g* | -nfp | --nf* \
        | -q | -quiet | --q* | -silent | --sil* | -v | -verb* \
        | -with-* | --with-* | -without-* | --without-* | --x)
          case "$ac configure args0 " in
            "$ac configure args1"*" '$ac arg' "* ) continue ;;
         esac
         ;;
        -* ) ac must keep next=true ;;
     esac
      as fn append ac configure args " '$ac arg'"
      ;;
    esac
```

```
done
done
{ ac configure args0=; unset ac configure args0;}
{ ac configure args1=; unset ac configure args1;}
# When interrupted or exit'd, cleanup temporary files, and complete
# config.log. We remove comments because anyway the quotes in there
# would cause problems or look ugly.
\# WARNING: Use '\'' to represent an apostrophe within the trap.
# WARNING: Do not start the trap code with a newline, due to a FreeBSD 4.0 bug.
trap 'exit status=$?
 # Save into config.log some information that might help in debugging.
   echo
   $as echo "## ----- ##
## Cache variables. ##
## ----- ##"
   echo
   # The following way of writing the cache mishandles newlines in values,
 for ac var in `(set)
                              2>\&1 | sed -n '\''s/^\([a-zA-Z][a-zA-Z0-
9 ] *\) = . * /\1/p'\''`; do
   eval ac val=\$$ac var
   case $ac val in #(
   *${as nl}*)
     case $ac_var in #(
     * cv *) { $as echo "$as me:${as lineno-$LINENO}: WARNING: cache variable
$ac var contains a newline" >&5
$as echo "$as me: WARNING: cache variable $ac var contains a newline" >&2;} ;;
     esac
     case $ac var in #(
      | IFS | as nl) ;; #(
     BASH ARGV | BASH SOURCE) eval $ac var= ;; #(
     *) { eval $ac var=; unset $ac var;} ;;
     esac ;;
   esac
  done
  (set) 2>&1 |
   case $as nl`(ac space='\'' '\''; set) 2>&1` in #(
   *${as nl}ac space=\ *)
```

```
sed -n \
     "s/'\''/\\\\\\'\'\'/g;
s/^{([ \$as \ cr \ alnum]* \ cv \ [ \$as \ cr \ alnum]*/)=/(.*/)//1='\''/p"}
     ;; #(
   *)
     sed -n "/^[_$as_cr_alnum]*_cv_[ $as cr alnum]*=/p"
     ;;
   esac |
   sort
)
   echo
   $as echo "## ----- ##
## Output variables. ##
## ----- ##"
   echo
   for ac var in $ac subst vars
    eval ac_val=\$$ac_var
    case $ac val in
     * \ ' \ ' ' * )
                    ac val=`$as echo
                                    "$ac val"
                                                          sed
"s/'\''/'\\\\\\\\\'\''\''/g"`;;
     $as echo "$ac var='\''$ac val'\''"
   done | sort
   echo
   if test -n "$ac subst files"; then
     $as echo "## ----- ##
## File substitutions. ##
## ----- ##"
     echo
     for ac var in $ac subst files
     eval ac_val=\$$ac_var
     case $ac val in
              ac val=`$as echo "$ac_val" |
     *\'\''*)
                                                              sed
"s/'\''/\\\\\\\\\'\''\''/q"`;;
     $as echo "$ac var='\''$ac val'\''"
```

```
done | sort
     echo
    fi
    if test -s confdefs.h; then
      $as echo "## ----- ##
## confdefs.h. ##
## ---- ##"
     echo
     cat confdefs.h
     echo
    fi
   test "$ac signal" != 0 &&
      $as echo "$as me: caught signal $ac signal"
    $as echo "$as me: exit $exit status"
  } >&5
  rm -f core *.core core.conftest.* &&
    rm -f -r conftest* confdefs* conf$$* $ac_clean_files &&
   exit $exit status
• 0
for ac signal in 1 2 13 15; do
  trap 'ac signal='$ac signal'; as fn exit 1' $ac signal
done
ac signal=0
# confdefs.h avoids OS command line length limits that DEFS can exceed.
rm -f -r conftest* confdefs.h
$as_echo "/* confdefs.h */" > confdefs.h
# Predefined preprocessor variables.
cat >>confdefs.h << ACEOF
#define PACKAGE NAME "$PACKAGE NAME"
ACEOF
cat >>confdefs.h << ACEOF
#define PACKAGE TARNAME "$PACKAGE TARNAME"
ACEOF
cat >>confdefs.h << ACEOF
```

```
#define PACKAGE VERSION "$PACKAGE VERSION"
ACEOF
cat >>confdefs.h << ACEOF
#define PACKAGE STRING "$PACKAGE STRING"
ACEOF
cat >>confdefs.h << ACEOF
#define PACKAGE_BUGREPORT "$PACKAGE_BUGREPORT"
ACEOF
cat >>confdefs.h << ACEOF
#define PACKAGE URL "$PACKAGE URL"
ACEOF
# Let the site file select an alternate cache file if it wants to.
# Prefer an explicitly selected file to automatically selected ones.
ac site file1=NONE
ac site file2=NONE
if test -n "$CONFIG SITE"; then
  # We do not want a PATH search for config.site.
 case $CONFIG SITE in #((
    -*) ac site file1=./$CONFIG SITE;;
    */*) ac site file1=$CONFIG SITE;;
       ac site file1=./$CONFIG SITE;;
  esac
elif test "x$prefix" != xNONE; then
  ac site file1=$prefix/share/config.site
 ac site file2=$prefix/etc/config.site
else
  ac_site_file1=$ac_default_prefix/share/config.site
 ac site file2=$ac default prefix/etc/config.site
for ac site file in "$ac site file1" "$ac site file2"
 test "x$ac site file" = xNONE && continue
  if test /dev/null != "$ac site_file" && test -r "$ac_site_file"; then
    { $as echo "$as me:${as lineno-$LINENO}: loading site script $ac site file"
>&5
$as echo "$as me: loading site script $ac site file" >&6;}
```

```
sed \frac{s}{\frac{1}{2}} "$ac site file" >&5
    . "$ac site file" \
      || { {\text{sas echo "$as me:}}{as lineno-$LINENO}}: error: in `$ac pwd':" >&5
$as echo "$as me: error: in \`$ac pwd':" >&2;}
as fn error $? "failed to load site script $ac site file
See \`config.log' for more details" "$LINENO" 5; }
  fi
done
if test -r "$cache file"; then
  # Some versions of bash will fail to source /dev/null (special files
  # actually), so we avoid doing that. DJGPP emulates it as a regular file.
  if test /dev/null != "$cache file" && test -f "$cache file"; then
    { $as echo "$as me:{as lineno-$LINENO}: loading cache $cache file" >&5
$as echo "$as me: loading cache $cache file" >&6;}
   case $cache_file in
      [\] ?: [\] . "$cache file";;
      *)
                              . "./$cache_file";;
   esac
  fi
else
  { $as echo "$as me:${as lineno-$LINENO}: creating cache $cache file" >&5
$as_echo "$as_me: creating cache $cache file" >&6;}
 >$cache file
fi
# Check that the precious variables saved in the cache have kept the same
# value.
ac cache corrupted=false
for ac var in $ac precious vars; do
 eval ac old set=\$ac cv env ${ac var} set
 eval ac new set=\$ac env ${ac var} set
 eval ac old val=\$ac cv env ${ac var} value
 eval ac new val=\$ac env ${ac var} value
 case $ac old set, $ac new set in
    set,)
      { $as echo "$as me:${as lineno-$LINENO}: error: \`$ac var' was set to
\`$ac old val' in the previous run" >&5
$as echo "$as me: error: \`$ac var' was set to \`$ac old val' in the previous run"
>&2;}
      ac cache corrupted=: ;;
```

```
, set)
              { $as echo "$as me:${as lineno-$LINENO}: error: \`$ac var' was not set in
the previous run" >&5
a = cho \ as me: error: \`\ac var' was not set in the previous run'' >\alpha 2;}
             ac cache corrupted=: ;;
         ,);;
         *)
             if test "x$ac old val" != "x$ac new val"; then
              # differences in whitespace do not lead to failure.
             ac old val w=`echo x $ac old val`
             ac new val w=`echo x $ac new val`
             if test "$ac old val w" != "$ac new val w"; then
                  { $as echo "$as me:${as lineno-$LINENO}: error: \`$ac var' has changed
since the previous run:" >&5
$as echo "$as me: error: \`$ac var' has changed since the previous run:" >&2;}
                 ac cache corrupted=:
             else
                  { $as echo "$as me:${as lineno-$LINENO}: warning: ignoring whitespace
changes in \`$ac var' since the previous run:" >&5
$as_echo "$as_me: warning: ignoring whitespace changes in \`$ac_var' since the
previous run:" >&2;}
                 eval $ac var=\$ac old val
              { sa_echo "sa_me:sa_lineno-slineno}: former value: \`sac_old val'"
>&5
$as echo "$as me: former value: \`$ac old val'" >&2;}
              { $as_echo "$as_me:${as_lineno-$LINENO}: current value: \`$ac_new_val'"
>&5
$as echo "$as me: current value: \`$ac new val'" >&2;}
              fi;;
    esac
     # Pass precious variables to config.status.
    if test "$ac new set" = set; then
         case $ac new val in
         *\'*) ac arg=ac var=\ac var=
         *) ac arg=$ac var=$ac new val ;;
         esac
         case " $ac configure args " in
             *" '$ac arg' "*) ;; # Avoid dups. Use of quotes ensures accuracy.
              *) as fn append ac configure args " '$ac arg'" ;;
         esac
```

```
fi
done
if $ac cache corrupted; then
  { $as echo "$as me:${as lineno-$LINENO}: error: in \`$ac pwd':" >&5
$as echo "$as me: error: in \`$ac pwd':" >&2;}
  { $as echo "$as me:${as lineno-$LINENO}: error: changes in the environment can
compromise the build" >&5
$as echo "$as me: error: changes in the environment can compromise the build"
 as fn error $? "run \`make distclean' and/or \`rm $cache file' and start over"
"$LINENO" 5
fi
## ----- ##
## Main body of script. ##
## ----- ##
ac ext=c
ac cpp='$CPP $CPPFLAGS'
ac compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac ext >&5'
ac link='$CC -o conftest$ac exeext $CFLAGS $CPPFLAGS $LDFLAGS conftest.$ac ext
$LIBS >&5'
ac compiler gnu=$ac cv c compiler gnu
ac config headers="$ac config headers config.h"
# Checks for programs.
ac ext=c
ac cpp='$CPP $CPPFLAGS'
ac compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac ext >&5'
ac link='$CC -o conftest$ac exeext $CFLAGS $CPPFLAGS $LDFLAGS conftest.$ac ext
$LIBS >&5'
ac compiler gnu=$ac cv c compiler gnu
if test -n "$ac tool prefix"; then
  # Extract the first word of "${ac tool prefix}gcc", so it can be a program name
with args.
set dummy ${ac tool prefix}gcc; ac word=$2
{ $as echo "$as me:{as lineno-$LINENO}: checking for $ac word" >&5
$as echo n "checking for $ac word... " >&6; }
```

```
if ${ac cv prog CC+:} false; then :
  a echo n "(cached) " >&6
else
  if test -n "$CC"; then
  ac cv prog CC="$CC" # Let the user override the test.
as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
  IFS=$as save IFS
  test -z "$as dir" && as dir=.
    for ac exec ext in '' $ac_executable_extensions; do
  if as fn executable p "$as dir/$ac word$ac exec ext"; then
    ac cv prog CC="${ac tool prefix}gcc"
    $as_echo "$as_me:${as_lineno-$LINENO}: found $as_dir/$ac_word$ac_exec_ext"
>&5
   break 2
  fi
done
  done
IFS=$as_save_IFS
fi
fi
CC=$ac_cv_prog_CC
if test -n "$CC"; then
  { as_echo "as_me:{as_lineno-$LINENO}: result: $CC" >&5
$as echo "$CC" >&6; }
else
  { $as echo "$as me:${as lineno-$LINENO}: result: no" >&5
$as echo "no" >&6; }
fi
fi
if test -z "$ac_cv_prog_CC"; then
 ac ct CC=$CC
  # Extract the first word of "gcc", so it can be a program name with args.
set dummy gcc; ac word=$2
{ $as echo "$as me:{as lineno-$LINENO}: checking for $ac word" >&5
$as echo n "checking for $ac_word... " >&6; }
```

```
if ${ac_cv_prog_ac_ct_CC+:} false; then :
  a echo n "(cached) " >&6
else
  if test -n "$ac ct CC"; then
  ac cv prog ac ct CC="$ac ct CC" # Let the user override the test.
as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
  IFS=$as save IFS
  test -z "$as dir" && as dir=.
    for ac exec ext in '' $ac_executable_extensions; do
  if as_fn_executable_p "$as_dir/$ac_word$ac exec ext"; then
    ac cv prog ac ct CC="gcc"
    $as echo "$as me:${as lineno-$LINENO}: found $as dir/$ac word$ac exec ext"
>&5
   break 2
  fi
done
  done
IFS=$as_save_IFS
fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac ct CC"; then
  { $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_ct_CC" >&5
$as echo "$ac ct CC" >&6; }
else
  { $as echo "$as me:${as lineno-$LINENO}: result: no" >&5
$as echo "no" >&6; }
fi
  if test "xac ct CC" = x; then
   CC=""
  else
   case $cross compiling:$ac tool warned in
{ $as echo "$as me:${as lineno-$LINENO}: WARNING: using cross tools not prefixed
with host triplet" >&5
$as echo "$as me: WARNING: using cross tools not prefixed with host triplet" >&2;}
```

```
ac tool warned=yes ;;
esac
   CC=$ac ct CC
  fi
else
  CC="$ac cv prog CC"
if test -z "$CC"; then
          if test -n "$ac tool prefix"; then
    # Extract the first word of "${ac tool prefix}cc", so it can be a program name
with args.
set dummy ${ac tool prefix}cc; ac word=$2
{ $as echo "$as me:{as lineno-$LINENO}: checking for $ac word" >&5
$as echo n "checking for $ac word... " >&6; }
if ${ac cv prog CC+:} false; then :
  a echo n "(cached) " >&6
else
  if test -n "$CC"; then
 ac cv prog CC="$CC" # Let the user override the test.
as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
 IFS=$as save IFS
  test -z "$as dir" && as dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
  if as fn executable p "$as dir/$ac word$ac exec ext"; then
    ac cv prog CC="${ac tool prefix}cc"
    $as_echo "$as_me:${as_lineno-$LINENO}: found $as_dir/$ac_word$ac_exec_ext"
>&5
   break 2
  fi
done
  done
IFS=$as save IFS
fi
fi
CC=$ac cv prog CC
if test -n "$CC"; then
```

```
{ $as echo "$as me:${as lineno-$LINENO}: result: $CC" >&5
$as echo "$CC" >&6; }
else
  { $as echo "$as me:${as lineno-$LINENO}: result: no" >&5
$as echo "no" >&6; }
fi
  fi
fi
if test -z "$CC"; then
  # Extract the first word of "cc", so it can be a program name with args.
set dummy cc; ac word=$2
{ $as echo "$as me:{as lineno-$LINENO}: checking for $ac word" >&5
$as echo n "checking for $ac word... " >&6; }
if ${ac cv prog CC+:} false; then :
  a echo n "(cached) " > 6
else
  if test -n "$CC"; then
 ac cv prog CC="$CC" # Let the user override the test.
else
  ac prog rejected=no
as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
  IFS=$as save IFS
  test -z "$as_dir" && as_dir=.
    for ac exec ext in '' $ac executable extensions; do
  if as fn executable p "$as dir/$ac word$ac exec ext"; then
    if test "$as dir/$ac word$ac exec ext" = "/usr/ucb/cc"; then
       ac prog rejected=yes
       continue
    fi
    ac cv prog CC="cc"
    $as echo "$as me:${as lineno-$LINENO}: found $as dir/$ac word$ac exec ext"
>&5
   break 2
  fi
done
  done
IFS=$as save IFS
```

```
if test $ac_prog_rejected = yes; then
  # We found a bogon in the path, so make sure we never use it.
  set dummy $ac cv prog CC
  shift
  if test $# != 0; then
    # We chose a different compiler from the bogus one.
    # However, it has the same basename, so the bogon will be chosen
    # first if we set CC to just the basename; use the full file name.
   ac cv prog CC="$as dir/$ac word${1+' '}$@"
  fi
fi
fi
fi
CC=$ac cv prog CC
if test -n "$CC"; then
  { as_echo "$as_me:${as_lineno-$LINENO}: result: $CC" > &5
$as echo "$CC" >&6; }
else
  { $as echo "$as me:${as lineno-$LINENO}: result: no" >&5
$as echo "no" >&6; }
fi
fi
if test -z "$CC"; then
  if test -n "$ac tool prefix"; then
  for ac prog in cl.exe
    # Extract the first word of "$ac tool prefix$ac prog", so it can be a program
name with args.
set dummy $ac tool prefix$ac prog; ac word=$2
{ $as echo "$as me:{as lineno-$LINENO}: checking for $ac word" >&5
$as echo n "checking for $ac word... " >&6; }
if ${ac cv prog CC+:} false; then :
  $as echo n "(cached) " >&6
else
  if test -n "$CC"; then
  ac cv prog CC="$CC" # Let the user override the test.
else
```

```
as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
  IFS=$as save IFS
  test -z "$as dir" && as dir=.
    for ac_exec_ext in '' $ac_executable_extensions; do
  if as fn executable p "$as dir/$ac word$ac exec ext"; then
    ac_cv_prog_CC="$ac_tool_prefix$ac_prog"
    $as_echo "$as_me:${as_lineno-$LINENO}: found $as_dir/$ac_word$ac_exec_ext"
>&5
   break 2
  fi
done
  done
IFS=$as save IFS
fi
fi
CC=$ac cv prog CC
if test -n "$CC"; then
  { $as echo "$as me:${as lineno-$LINENO}: result: $CC" >&5
$as echo "$CC" >&6; }
else
  { $as echo "$as me:{as lineno-$LINENO}: result: no" >&5
$as echo "no" >&6; }
fi
   test -n "$CC" && break
  done
fi
if test -z "$CC"; then
 ac ct CC=$CC
 for ac prog in cl.exe
do
  # Extract the first word of "$ac_prog", so it can be a program name with args.
set dummy $ac prog; ac word=$2
{ $as echo "$as me:{as lineno-$LINENO}: checking for $ac word" >&5
$as echo n "checking for $ac word... " >&6; }
if ${ac cv prog ac ct CC+:} false; then :
  a echo n "(cached) " >&6
```

```
else
 if test -n "$ac_ct_CC"; then
 ac_cv_prog_ac_ct_CC="$ac_ct_CC" # Let the user override the test.
as_save_IFS=$IFS; IFS=$PATH_SEPARATOR
for as dir in $PATH
do
 IFS=$as save IFS
 test -z "$as_dir" && as_dir=.
    for ac exec ext in '' $ac executable extensions; do
  if as fn executable p "$as dir/$ac word$ac exec ext"; then
   ac_cv_prog_ac_ct_CC="$ac_prog"
   $as echo "$as me:${as lineno-$LINENO}: found $as dir/$ac word$ac exec ext"
>&5
  break 2
  fi
done
  done
IFS=$as save IFS
fi
fi
ac_ct_CC=$ac_cv_prog_ac_ct_CC
if test -n "$ac ct CC"; then
 { $as echo "$as me:${as lineno-$LINENO}: result: $ac ct CC" >&5
$as echo "$ac ct CC" >&6; }
else
  { $as echo "$as me:{as lineno-$LINENO}: result: no" >&5
$as echo "no" >&6; }
fi
 test -n "$ac ct CC" && break
done
  if test "xac ct CC" = x; then
   CC=""
   case $cross compiling:$ac tool warned in
yes:)
```

```
{ $as echo "$as me:${as lineno-$LINENO}: WARNING: using cross tools not prefixed
with host triplet" >&5
$as echo "$as me: WARNING: using cross tools not prefixed with host triplet" >&2;}
ac tool warned=yes ;;
esac
   CC=$ac ct CC
  fi
fi
fi
test -z "$CC" && { { $as echo "$as me:${as lineno-$LINENO}: error: in \`$ac pwd':"
>&5
$as echo "$as me: error: in \`$ac pwd':" >&2;}
as fn error $? "no acceptable C compiler found in \$PATH
See \`config.log' for more details" "$LINENO" 5; }
# Provide some information about the compiler.
$as_echo "$as_me:${as_lineno-$LINENO}: checking for C compiler version" >&5
set X $ac compile
ac compiler=$2
for ac option in --version -v -V -qversion; do
  { { ac try="$ac compiler $ac option >&5"
case "(($ac try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac_try_echo=$ac_try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
  (eval "$ac compiler $ac option >&5") 2>conftest.err
 ac status=$?
  if test -s conftest.err; then
    sed '10a\
... rest of stderr output deleted ...
         10q' conftest.err >conftest.er1
   cat conftest.er1 >&5
  fi
  rm -f conftest.erl conftest.err
  as echo "as me:{as lineno-$LINENO}: \$? = $ac status" >&5
  test $ac status = 0; }
```

done

```
cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int
main ()
{
 return 0;
}
ACEOF
ac clean files save=$ac clean files
ac clean files="$ac clean files a.out a.out.dSYM a.exe b.out"
# Try to create an executable without -o first, disregard a.out.
# It will help us diagnose broken compilers, and finding out an intuition
# of exeext.
{ $as echo "$as me:${as lineno-$LINENO}: checking whether the C compiler works"
>&5
$as echo n "checking whether the C compiler works... " >&6; }
ac link default=`$as echo "$ac link" | sed 's/ -o *conftest[^ ]*//'`
# The possible output files:
ac files="a.out conftest.exe conftest a.exe a out.exe b.out conftest.*"
ac rmfiles=
for ac file in $ac files
do
  case $ac file in
    *.$ac ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg | *.map |
*.inf | *.dSYM | *.o | *.obj ) ;;
    * ) ac rmfiles="$ac rmfiles $ac file";;
  esac
done
rm -f $ac rmfiles
if { ac try="$ac link default"
case "(($ac try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac try echo=$ac try;;
```

```
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
  (eval "$ac link default") 2>&5
 ac status=$?
 a = cho  "$as me:${as lineno-$LINENO}: \$? = $ac status" >&5
 test $ac status = 0; }; then :
  # Autoconf-2.13 could set the ac cv exeext variable to `no'.
# So ignore a value of `no', otherwise this would lead to `EXEEXT = no'
# in a Makefile. We should not override ac cv exeext if it was cached,
# so that the user can short-circuit this test for compilers unknown to
# Autoconf.
for ac file in $ac files ''
 test -f "$ac file" || continue
 case $ac file in
    *.$ac ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg | *.map |
*.inf | *.dSYM | *.o | *.obj )
     ;;
    [ab].out)
      # We found the default executable, but exeext='' is most
      # certainly right.
     break;;
    *.* )
     if test "${ac_cv_exeext+set}" = set && test "$ac_cv_exeext" != no;
     then :; else
        ac_cv_exeext=`expr "$ac_file" : '[^.]*\(\..*\)'`
     fi
      # We set ac cv exeext here because the later test for it is not
      # safe: cross compilers may not add the suffix if given an `-o'
      # argument, so we may need to know it at that point already.
      # Even if this section looks crufty: it has the advantage of
      # actually working.
     break;;
    * )
     break;;
 esac
test "$ac_cv_exeext" = no && ac_cv_exeext=
else
```

```
ac file=''
fi
if test -z "$ac file"; then :
    { as echo "as me:{as lineno-$LINENO}: result: no" >&5
$as echo "no" >&6; }
$as echo "$as me: failed program was:" >&5
sed s/^/ /' conftest.$ac ext >&5
{ $as_echo "$as_me:${as_lineno-$LINENO}: error: in `$ac_pwd':" > & 5
$as echo "$as me: error: in \`$ac pwd':" >&2;}
as fn error 77 "C compiler cannot create executables
See \`config.log' for more details" "$LINENO" 5; }
else
    { $as echo "$as me:${as lineno-$LINENO}: result: yes" >&5
$as echo "yes" >&6; }
fi
{ $as echo "$as me:${as lineno-$LINENO}: checking for C compiler default output
file name" >&5
$as echo n "checking for C compiler default output file name... " >&6; }
{ $as echo "$as me:{as lineno-$LINENO}: result: $ac file" >&5
$as echo "$ac file" >&6; }
ac exeext=$ac cv exeext
rm -f -r a.out a.out.dSYM a.exe conftest$ac cv exeext b.out
ac clean files=$ac clean files save
{ $as echo "$as me:{as lineno-$LINENO}: checking for suffix of executables" >&5
$as echo n "checking for suffix of executables... " >&6; }
if { ac try="$ac link"
case "(($ac try" in
    *\"* | *\`* | *\\*) ac try_echo=\$ac_try;;
    *) ac try echo=$ac try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
    (eval "$ac link") 2>&5
    ac status=$?
    a = cho "sas me:a = cho "
    test $ac status = 0; }; then :
    # If both `conftest.exe' and `conftest' are `present' (well, observable)
# catch `conftest.exe'. For instance with Cygwin, `ls conftest' will
# work properly (i.e., refer to `conftest.exe'), while it won't with
```

```
# `rm'.
for ac_file in conftest.exe conftest conftest.*; do
  test -f "$ac file" || continue
  case $ac file in
    *.$ac ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg | *.map |
*.inf | *.dSYM | *.o | *.obj ) ;;
    *.* ) ac cv exeext=`expr "$ac file" : '[^.]*\(\..*\)'`
       break;;
    * ) break;;
  esac
done
else
  { { $as echo "$as me:${as lineno-$LINENO}: error: in \`$ac pwd':" >&5
$as echo "$as me: error: in \`$ac pwd':" >&2;}
as fn error $? "cannot compute suffix of executables: cannot compile and link
See \`config.log' for more details" "$LINENO" 5; }
rm -f conftest conftest$ac cv exeext
{ $as echo "$as me:${as lineno-$LINENO}: result: $ac cv exeext" >&5
$as echo "$ac cv exeext" >&6; }
rm -f conftest.$ac ext
EXEEXT=$ac cv exeext
ac exeext=$EXEEXT
cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <stdio.h>
int
main ()
FILE *f = fopen ("conftest.out", "w");
return ferror (f) || fclose (f) != 0;
  return 0;
}
ACEOF
ac clean files="$ac clean files conftest.out"
# Check that the compiler produces executables we can run. If not, either
# the compiler is broken, or we cross compile.
```

```
{ $as echo "$as me:${as lineno-$LINENO}: checking whether we are cross compiling"
>&5
$as echo n "checking whether we are cross compiling... " >&6; }
if test "$cross compiling" != yes; then
  { { ac try="$ac link"
case "(($ac try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac try echo=$ac try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
  (eval "$ac link") 2>&5
 ac status=$?
  a = cho "$as me:${as lineno-$LINENO}: \$? = $ac status" >&5
  test $ac status = 0; }
  if { ac try='./conftest$ac cv exeext'
  { { case "(($ac try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac try echo=$ac try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as echo "$ac try echo"; } >&5
  (eval "$ac try") 2>&5
  ac status=$?
  as echo "as me:{as lineno-$LINENO}: \$? = $ac status" >&5
  test $ac status = 0; }; }; then
   cross_compiling=no
  else
    if test "$cross compiling" = maybe; then
     cross compiling=yes
    else
      { {sas echo "$as me:${as lineno-$LINENO}: error: in `$ac pwd':" > &5}}
$as echo "$as me: error: in \`$ac pwd':" >&2;}
as fn error $? "cannot run C compiled programs.
If you meant to cross compile, use \`--host'.
See \`config.log' for more details" "$LINENO" 5; }
    fi
  fi
fi
{ $as echo "$as me:{as lineno-$LINENO}: result: $cross compiling" >&5
$as echo "$cross compiling" >&6; }
```

```
rm -f conftest.$ac_ext conftest$ac_cv_exeext conftest.out
ac_clean_files=$ac_clean_files_save
{ $as echo "$as me:${as lineno-$LINENO}: checking for suffix of object files" >&5
$as echo n "checking for suffix of object files... " >&6; }
if ${ac cv objext+:} false; then :
  $as echo n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int.
main ()
{
  return 0;
ACEOF
rm -f conftest.o conftest.obj
if { ac try="$ac compile"
case "(($ac try" in
  *\"* | *\`* | *\\*) ac try echo=\$ac try;;
  *) ac try echo=$ac try;;
esac
eval ac try echo="\"\$as me:${as lineno-$LINENO}: $ac try echo\""
$as_echo "$ac_try_echo"; } >&5
  (eval "$ac compile") 2>&5
 ac status=$?
  a = cho "$as me:${as lineno-$LINENO}: \$? = $ac status" >&5
  test $ac status = 0; }; then :
  for ac file in conftest.o conftest.obj conftest.*; do
  test -f "$ac file" || continue;
  case $ac file in
    *.$ac ext | *.xcoff | *.tds | *.d | *.pdb | *.xSYM | *.bb | *.bbg | *.map |
*.inf | *.dSYM ) ;;
    *) ac cv objext=`expr "$ac file" : '.*\.\(.*\)'`
       break;;
  esac
done
else
```

```
$as echo "$as me: failed program was:" >&5
sed 's/^/| /' conftest.$ac ext >&5
{ { $as echo "$as me:${as lineno-$LINENO}: error: in \`$ac pwd':" >&5
$as echo "$as me: error: in \`$ac pwd':" >&2;}
as fn error $? "cannot compute suffix of object files: cannot compile
See \`config.log' for more details" "$LINENO" 5; }
rm -f conftest.$ac_cv_objext conftest.$ac_ext
{ $as echo "$as me:{as lineno-$LINENO}: result: $ac cv objext" >&5
$as echo "$ac cv objext" >&6; }
OBJEXT=$ac cv objext
ac objext=$OBJEXT
{ $as echo "$as me:${as lineno-$LINENO}: checking whether we are using the GNU C
compiler" >&5
$as echo n "checking whether we are using the GNU C compiler... " >&6; }
if ${ac_cv_c_compiler_gnu+:} false; then :
  $as echo n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int
main ()
#ifndef __GNUC__
      choke me
#endif
 return 0;
}
ACEOF
if ac fn c try compile "$LINENO"; then :
 ac compiler gnu=yes
else
  ac compiler gnu=no
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
ac cv c compiler gnu=$ac compiler gnu
```

```
fi
{ as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_c_compiler gnu" > & 5 }
$as echo "$ac cv c compiler gnu" >&6; }
if test $ac_compiler_gnu = yes; then
  GCC=yes
else
  GCC=
ac test CFLAGS=${CFLAGS+set}
ac save CFLAGS=$CFLAGS
{ $as echo "$as me:{as lineno-$LINENO}: checking whether $CC accepts -g" >&5
$as echo n "checking whether $CC accepts -g... " >&6; }
if ${ac cv prog cc g+:} false; then :
  a echo n "(cached) " > 6
else
 ac_save_c_werror_flag=$ac_c_werror_flag
  ac_c_werror_flag=yes
  ac cv prog cc g=no
  CFLAGS="-q"
  cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
int
main ()
{
 return 0;
ACEOF
if ac_fn_c_try_compile "$LINENO"; then :
 ac cv prog cc g=yes
else
  CFLAGS=""
      cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int
main ()
{
```

```
return 0;
ACEOF
if ac fn c try compile "$LINENO"; then :
else
  ac_c_werror_flag=$ac_save_c_werror_flag
       CFLAGS="-g"
       cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
int
main ()
{
 return 0;
}
ACEOF
if ac fn c try compile "$LINENO"; then :
 ac_cv_prog_cc_g=yes
fi
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
rm -f core conftest.err conftest.$ac_objext conftest.$ac_ext
fi
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
  ac_c_werror_flag=$ac_save_c_werror_flag
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_prog_cc_g" >&5
$as echo "$ac cv prog cc g" >&6; }
if test "$ac test CFLAGS" = set; then
 CFLAGS=$ac save CFLAGS
elif test $ac_cv_prog_cc_g = yes; then
  if test "$GCC" = yes; then
   CFLAGS="-g -02"
   CFLAGS="-g"
  fi
```

```
else
  if test "$GCC" = yes; then
   CFLAGS="-02"
 else
   CFLAGS=
  fi
fi
{ $as echo "$as me:${as lineno-$LINENO}: checking for $CC option to accept ISO
C89" >&5
$as echo n "checking for $CC option to accept ISO C89... " >&6; }
if ${ac cv prog cc c89+:} false; then :
  a echo n "(cached) " >&6
else
  ac cv prog cc c89=no
ac save CC=$CC
cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <stdarg.h>
#include <stdio.h>
struct stat;
/* Most of the following tests are stolen from RCS 5.7's src/conf.sh. */
struct buf { int x; };
FILE * (*rcsopen) (struct buf *, struct stat *, int);
static char *e (p, i)
    char **p;
    int i;
  return p[i];
static char *f (char * (*g) (char **, int), char **p, ...)
  char *s;
 va list v;
 va start (v,p);
  s = g (p, va arg (v, int));
 va end (v);
 return s;
}
/* OSF 4.0 Compaq cc is some sort of almost-ANSI by default. It has
   function prototypes and stuff, but not '\xHH' hex character constants.
```

fi

```
These don't provoke an error unfortunately, instead are silently treated
  as 'x'. The following induces an error, until -std is added to get
  proper ANSI mode. Curiously '\x00'!='x' always comes out true, for an
  array size at least. It's necessary to write '\x00'==0 to get something
  that's true only with -std. */
int osf4 cc array ['\x00' == 0 ? 1 : -1];
/* IBM C 6 for AIX is almost-ANSI by default, but it replaces macro parameters
   inside strings and character constants. */
#define FOO(x) 'x'
int xlc6 cc array[FOO(a) == 'x' ? 1 : -1];
int test (int i, double x);
struct s1 {int (*f) (int a);};
struct s2 {int (*f) (double a);};
int pairnames (int, char **, FILE *(*)(struct buf *, struct stat *, int), int,
int);
int argc;
char **argv;
int
main ()
return f (e, argv, 0) != argv[0] || f (e, argv, 1) != argv[1];
 return 0;
ACEOF
for ac arg in '' -qlanglvl=extc89 -qlanglvl=ansi -std \
      -Ae "-Aa -D HPUX SOURCE" "-Xc -D EXTENSIONS "
do
 CC="$ac save CC $ac arg"
 if ac fn c try compile "$LINENO"; then :
 ac cv prog cc c89=$ac arg
fi
rm -f core conftest.err conftest.$ac objext
  test "x$ac cv prog cc c89" != "xno" && break
done
rm -f conftest.$ac ext
CC=$ac save CC
```

```
# AC CACHE VAL
case "x$ac cv_prog_cc_c89" in
  x)
    { $as echo "$as me:${as lineno-$LINENO}: result: none needed" >&5
$as echo "none needed" >&6; } ;;
    { $as echo "$as me:${as lineno-$LINENO}: result: unsupported" >&5
$as echo "unsupported" >&6; } ;;
    CC="$CC $ac cv prog cc c89"
    { $as echo "$as me:{as lineno-$LINENO}: result: $ac cv prog cc c89" >&5
$as echo "$ac cv prog cc c89" >&6; } ;;
esac
if test "x$ac cv prog cc c89" != xno; then :
fi
ac ext=c
ac cpp='$CPP $CPPFLAGS'
ac compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS conftest.$ac_ext
$LIBS >&5'
ac compiler gnu=$ac cv c compiler gnu
# Checks for libraries.
# FIXME: Replace `main' with a function in `-lm':
{ $as echo "$as me:{as lineno-$LINENO}: checking for main in -lm" > &5
$as echo n "checking for main in -lm... " >&6; }
if ${ac cv lib m main+:} false; then :
  a echo n "(cached) " >&6
else
  ac check lib save LIBS=$LIBS
LIBS="-lm $LIBS"
cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
int
main ()
```

```
return main ();
 return 0;
ACEOF
if ac fn c try link "$LINENO"; then :
 ac cv lib m main=yes
  ac cv lib m main=no
fi
rm -f core conftest.err conftest.$ac objext \
    conftest$ac exeext conftest.$ac ext
LIBS=$ac check lib save LIBS
fi
{ $as echo "$as me:{as lineno-$LINENO}: result: $ac cv lib m main" >&5
$as echo "$ac cv lib m main" >&6; }
if test "x$ac cv lib m main" = xyes; then :
 cat >>confdefs.h << ACEOF
#define HAVE LIBM 1
ACEOF
 LIBS="-lm $LIBS"
fi
# Checks for header files.
ac ext=c
ac cpp='$CPP $CPPFLAGS'
ac compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac ext >&5'
ac_link='$CC -o conftest$ac_exeext $CFLAGS $CPPFLAGS $LDFLAGS conftest.$ac_ext
$LIBS >&5'
ac compiler gnu=$ac cv c compiler gnu
{ $as echo "$as me:${as lineno-$LINENO}: checking how to run the C preprocessor"
>&5
$as echo n "checking how to run the C preprocessor... " >&6; }
# On Suns, sometimes $CPP names a directory.
if test -n "$CPP" && test -d "$CPP"; then
 CPP=
fi
```

```
if test -z "$CPP"; then
  if ${ac_cv_prog_CPP+:} false; then :
  $as echo n "(cached) " >&6
else
      # Double quotes because CPP needs to be expanded
    for CPP in "$CC -E" "$CC -E -traditional-cpp" "/lib/cpp"
    do
      ac_preproc_ok=false
for ac_c_preproc_warn_flag in '' yes
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if STDC is defined, since
  # imits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#ifdef STDC
# include <limits.h>
#else
# include <assert.h>
#endif
                Syntax error
ACEOF
if ac fn c try cpp "$LINENO"; then :
else
  # Broken: fails on valid input.
continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext
  # OK, works on sane cases. Now check whether nonexistent headers
  # can be detected and how.
  cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <ac nonexistent.h>
if ac fn c try cpp "$LINENO"; then :
  # Broken: success on invalid input.
```

```
continue
else
  # Passes both tests.
ac preproc ok=:
break
fi
rm -f conftest.err conftest.i conftest.$ac ext
# Because of `break', AC PREPROC IFELSE's cleaning code was skipped.
rm -f conftest.i conftest.err conftest.$ac ext
if $ac preproc ok; then :
 break
fi
    done
    ac cv prog CPP=$CPP
fi
  CPP=$ac cv prog CPP
  ac cv prog CPP=$CPP
{ $as echo "$as me:${as lineno-$LINENO}: result: $CPP" >&5
$as echo "$CPP" >&6; }
ac preproc ok=false
for ac_c_preproc_warn_flag in '' yes
do
  # Use a header file that comes with gcc, so configuring glibc
  # with a fresh cross-compiler works.
  # Prefer <limits.h> to <assert.h> if STDC is defined, since
  # <limits.h> exists even on freestanding compilers.
  # On the NeXT, cc -E runs the code through the compiler's parser,
  # not just through cpp. "Syntax error" is here to catch this case.
  cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#ifdef STDC
# include <limits.h>
#else
# include <assert.h>
#endif
```

```
Syntax error
ACEOF
if ac_fn_c_try_cpp "$LINENO"; then :
else
  # Broken: fails on valid input.
continue
fi
rm -f conftest.err conftest.i conftest.$ac_ext
  # OK, works on same cases. Now check whether nonexistent headers
  # can be detected and how.
 cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <ac nonexistent.h>
ACEOF
if ac fn c try cpp "$LINENO"; then :
  # Broken: success on invalid input.
continue
else
  # Passes both tests.
ac preproc ok=:
break
fi
rm -f conftest.err conftest.i conftest.$ac ext
done
# Because of `break', AC PREPROC IFELSE's cleaning code was skipped.
rm -f conftest.i conftest.err conftest.$ac ext
if $ac_preproc_ok; then :
else
  { {\text{sas echo "$as me:}${as lineno-$LINENO}}: error: in `$ac pwd':" >&5}
$as echo "$as me: error: in \`$ac pwd':" >&2;}
as fn error $? "C preprocessor \"$CPP\" fails sanity check
See \`config.log' for more details" "$LINENO" 5; }
fi
ac ext=c
ac cpp='$CPP $CPPFLAGS'
ac compile='$CC -c $CFLAGS $CPPFLAGS conftest.$ac ext >&5'
```

```
ac link='$CC -o conftest$ac exeext $CFLAGS $CPPFLAGS $LDFLAGS conftest.$ac ext
$LIBS >&5'
ac compiler gnu=$ac cv c compiler gnu
{ $as echo "$as me:${as lineno-$LINENO}: checking for grep that handles long lines
and -e" >&5
$as echo n "checking for grep that handles long lines and -e... " >&6; }
if ${ac_cv_path_GREP+:} false; then :
  a echo n "(cached) " >&6
else
  if test -z "$GREP"; then
 ac path GREP found=false
  # Loop through the user's path and test for each of PROGNAME-LIST
  as save IFS=$IFS; IFS=$PATH_SEPARATOR
for as dir in $PATH$PATH SEPARATOR/usr/xpg4/bin
do
  IFS=$as save IFS
  test -z "$as_dir" && as_dir=.
    for ac_prog in grep ggrep; do
    for ac_exec_ext in '' $ac_executable_extensions; do
      ac path GREP="$as dir/$ac prog$ac exec ext"
      as fn executable p "$ac path GREP" || continue
# Check for GNU ac path GREP and select it if it is found.
  # Check for GNU $ac path GREP
case `"$ac path GREP" --version 2>&1` in
*GNU*)
  ac cv path GREP="$ac path GREP" ac path GREP found=:;;
  ac count=0
  $as echo n 0123456789 >"conftest.in"
  while :
  do
   cat "conftest.in" "conftest.in" >"conftest.tmp"
   mv "conftest.tmp" "conftest.in"
   cp "conftest.in" "conftest.nl"
    $as echo 'GREP' >> "conftest.nl"
    "$ac path GREP" -e 'GREP$' -e '-(cannot match)-' < "conftest.nl"
>"conftest.out" 2>/dev/null || break
    diff "conftest.out" "conftest.nl" >/dev/null 2>&1 || break
    as fn arith $ac count + 1 && ac count=$as val
```

```
if test $ac_count -gt ${ac_path GREP max-0}; then
      # Best one so far, save it but keep looking for a better one
     ac cv path GREP="$ac path GREP"
      ac path GREP max=$ac count
    fi
    # 10*(2^10) chars as input seems more than enough
    test $ac count -gt 10 && break
  done
  rm -f conftest.in conftest.tmp conftest.nl conftest.out;;
esac
      $ac path GREP found && break 3
    done
  done
  done
IFS=$as save IFS
  if test -z "$ac cv path GREP"; then
    as_fn_error $?
                      "no
                               acceptable
                                           grep could be found
                                                                              in
$PATH$PATH SEPARATOR/usr/xpg4/bin" "$LINENO" 5
  fi
else
  ac cv path GREP=$GREP
fi
fi
{ $as echo "$as me:${as lineno-$LINENO}: result: $ac cv path GREP" >&5
$as_echo "$ac_cv_path_GREP" >&6; }
GREP="$ac cv path GREP"
{ $as echo "$as me:{as lineno-$LINENO}: checking for egrep" >&5
$as_echo_n "checking for egrep... " >&6; }
if ${ac cv path EGREP+:} false; then :
  a = cho n "(cached) " > 66
else
  if echo a | GREP -E '(a|b)' > dev/null 2>&1
  then ac cv path EGREP="$GREP -E"
  else
     if test -z "$EGREP"; then
  ac path EGREP found=false
  # Loop through the user's path and test for each of PROGNAME-LIST
```

```
as save IFS=$IFS; IFS=$PATH SEPARATOR
for as_dir in $PATH$PATH_SEPARATOR/usr/xpg4/bin
do
 IFS=$as save IFS
 test -z "$as dir" && as dir=.
    for ac prog in egrep; do
    for ac exec ext in '' $ac executable extensions; do
      ac path EGREP="$as dir/$ac prog$ac exec ext"
      as_fn_executable_p "$ac_path_EGREP" || continue
# Check for GNU ac path EGREP and select it if it is found.
  # Check for GNU $ac path EGREP
case `"$ac path EGREP" --version 2>&1` in
*GNU*)
  ac cv path EGREP="$ac path EGREP" ac path EGREP found=:;;
  ac count=0
  $as echo n 0123456789 >"conftest.in"
 while :
 do
   cat "conftest.in" "conftest.in" >"conftest.tmp"
   mv "conftest.tmp" "conftest.in"
    cp "conftest.in" "conftest.nl"
    $as echo 'EGREP' >> "conftest.nl"
    "$ac path EGREP" 'EGREP$' < "conftest.nl" > "conftest.out" 2>/dev/null || break
   diff "conftest.out" "conftest.nl" >/dev/null 2>&1 || break
    as fn arith $ac count + 1 && ac count=$as val
    if test $ac_count -gt ${ac_path_EGREP_max-0}; then
      # Best one so far, save it but keep looking for a better one
     ac cv path EGREP="$ac path EGREP"
     ac_path_EGREP_max=$ac_count
    fi
    \# 10*(2^10) chars as input seems more than enough
    test $ac count -gt 10 && break
  rm -f conftest.in conftest.tmp conftest.nl conftest.out;;
esac
      $ac path EGREP found && break 3
   done
  done
  done
```

```
IFS=$as save IFS
 if test -z "$ac_cv_path_EGREP"; then
   as fn error $? "no acceptable egrep could be found
                                                                             in
$PATH$PATH SEPARATOR/usr/xpg4/bin" "$LINENO" 5
else
 ac cv path EGREP=$EGREP
  fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_path_EGREP" >&5
$as echo "$ac cv path EGREP" >&6; }
EGREP="$ac cv path EGREP"
{ $as echo "$as me:{as lineno-$LINENO}: checking for ANSI C header files" >&5
$as echo n "checking for ANSI C header files... " >&6; }
if ${ac cv header stdc+:} false; then :
 a echo n "(cached) " >&6
else
 cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <stdlib.h>
#include <stdarg.h>
#include <string.h>
#include <float.h>
int
main ()
{
 return 0;
}
ACEOF
if ac fn c try compile "$LINENO"; then :
 ac cv header stdc=yes
 ac cv header stdc=no
fi
```

```
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
if test $ac_cv_header_stdc = yes; then
  # SunOS 4.x string.h does not declare mem*, contrary to ANSI.
 cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
#include <string.h>
ACEOF
if (eval "$ac cpp conftest.$ac ext") 2>&5 |
  $EGREP "memchr" >/dev/null 2>&1; then :
else
  ac cv header stdc=no
fi
rm -f conftest*
fi
if test $ac_cv_header_stdc = yes; then
  # ISC 2.0.2 stdlib.h does not declare free, contrary to ANSI.
  cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <stdlib.h>
ACEOF
if (eval "$ac_cpp conftest.$ac_ext") 2>&5 |
  $EGREP "free" >/dev/null 2>&1; then :
else
 ac cv header stdc=no
fi
rm -f conftest*
fi
if test $ac cv header stdc = yes; then
  # /bin/cc in Irix-4.0.5 gets non-ANSI ctype macros unless using -ansi.
  if test "$cross compiling" = yes; then :
else
```

```
cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#include <ctype.h>
#include <stdlib.h>
#if ((' ' & 0x0FF) == 0x020)
# define ISLOWER(c) ('a' <= (c) && (c) <= 'z')
# define TOUPPER(c) (ISLOWER(c) ? 'A' + ((c) - 'a') : (c))
#else
# define ISLOWER(c) \
               (('a' <= (c) && (c) <= 'i') \
                 || ('j' <= (c) && (c) <= 'r') \
                 | | ('s' \le (c) \&\& (c) \le 'z'))
# define TOUPPER(c) (ISLOWER(c) ? ((c) \mid 0x40) : (c))
#endif
#define XOR(e, f) (((e) && !(f)) || (!(e) && (f)))
int
main ()
  int i;
  for (i = 0; i < 256; i++)
    if (XOR (islower (i), ISLOWER (i))
      || toupper (i) != TOUPPER (i))
      return 2;
  return 0;
_ACEOF
if ac fn c try run "$LINENO"; then :
else
  ac cv header stdc=no
fi
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac exeext \
 conftest.$ac objext conftest.beam conftest.$ac ext
fi
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_header_stdc" >&5
$as_echo "$ac_cv_header stdc" >&6; }
if test $ac_cv_header_stdc = yes; then
```

```
$as echo "#define STDC HEADERS 1" >>confdefs.h
fi
# On IRIX 5.3, sys/types and inttypes.h are conflicting.
for ac header in sys/types.h sys/stat.h stdlib.h string.h memory.h strings.h \
             inttypes.h stdint.h unistd.h
do:
  as ac Header=`$as echo "ac cv header $ac header" | $as tr sh`
ac fn c check header compile
                                "$LINENO"
                                               "$ac header" "$as ac Header"
"$ac includes default
if eval test \x^{\s} as ac Header"\" = x"yes"; then :
 cat >>confdefs.h << ACEOF
#define `$as echo "HAVE $ac header" | $as tr cpp` 1
_ACEOF
fi
done
for ac header in inttypes.h netinet/in.h stdlib.h string.h sys/socket.h unistd.h
do:
  as ac Header=`$as echo "ac cv header $ac header" | $as tr sh`
ac_fn_c_check_header_mongrel
                                 "$LINENO"
                                               "$ac header"
                                                                 "$as ac Header"
"$ac includes default"
if eval test \"x\ as ac Header"\" = x"yes"; then :
  cat >>confdefs.h << ACEOF
#define `$as echo "HAVE $ac header" | $as tr cpp` 1
ACEOF
fi
done
# Checks for typedefs, structures, and compiler characteristics.
{ $as echo "$as me:${as lineno-$LINENO}: checking for stdbool.h that conforms to
C99" >&5
```

```
$as echo n "checking for stdbool.h that conforms to C99... " >&6; }
if ${ac_cv_header_stdbool_h+:} false; then :
  a echo n "(cached) " >&6
else
  cat confdefs.h - <<_ACEOF >conftest.$ac_ext
/* end confdefs.h. */
             #include <stdbool.h>
             #ifndef bool
              "error: bool is not defined"
             #endif
             #ifndef false
              "error: false is not defined"
             #endif
             #if false
              "error: false is not 0"
             #endif
             #ifndef true
              "error: true is not defined"
             #endif
             #if true != 1
              "error: true is not 1"
             #endif
             #ifndef __bool_true_false_are_defined
              "error: bool true false are defined is not defined"
             #endif
             struct s { Bool s: 1; Bool t; } s;
             char a[true == 1 ? 1 : -1];
             char b[false == 0 ? 1 : -1];
             char c[__bool_true_false_are_defined == 1 ? 1 : -1];
             char d[(bool) 0.5 == true ? 1 : -1];
             /* See body of main program for 'e'. */
             char f[(Bool) 0.0 == false ? 1 : -1];
             char g[true];
             char h[sizeof ( Bool)];
             char i[sizeof s.t];
             enum \{ j = false, k = true, l = false * true, m = true * 256 \};
             /* The following fails for
                HP aC++/ANSI C B3910B A.05.55 [Dec 04 2003]. */
```

```
Bool n[m];
             char o[sizeof n == m * sizeof n[0] ? 1 : -1];
             char p[-1 - (Bool) 0 < 0 && -1 - (bool) 0 < 0 ? 1 : -1];
             /* Catch a bug in an HP-UX C compiler. See
                http://gcc.gnu.org/ml/gcc-patches/2003-12/msg02303.html
                http://lists.gnu.org/archive/html/bug-coreutils/2005-
11/msg00161.html
              * /
             _Bool q = true;
             Bool *pq = &q;
int
main ()
{
             bool e = &s;
             *pq |= q;
             *pq |= ! q;
             /* Refer to every declared value, to avoid compiler optimizations.
* /
             return (!a + !b + !c + !d + !e + !f + !g + !h + !i + !!j + !k + !!l
                     + !m + !n + !o + !p + !q + !pq);
  return 0;
}
_ACEOF
if ac fn c try compile "$LINENO"; then :
 ac cv header stdbool h=yes
else
  ac cv header stdbool h=no
fi
rm -f core conftest.err conftest.$ac objext conftest.$ac ext
fi
{ $as echo "$as me:\{as lineno-\$LINENO\}: result: $ac cv header stdbool h" >&5
$as_echo "$ac_cv_header_stdbool_h" >&6; }
  ac fn c check type "$LINENO" " Bool" "ac cv type Bool" "$ac includes default"
if test "x$ac cv type Bool" = xyes; then :
cat >>confdefs.h << ACEOF
#define HAVE BOOL 1
```

```
ACEOF
fi
ac_fn_c_find_intX_t "$LINENO" "8" "ac_cv_c_int8_t"
case $ac_cv_c_int8_t in #(
 no|yes) ;; #(
  *)
cat >>confdefs.h <<_ACEOF</pre>
#define int8 t $ac cv c int8 t
ACEOF
;;
esac
# Checks for library functions.
for ac_header in stdlib.h
do:
  ac_fn_c_check_header_mongrel "$LINENO" "stdlib.h" "ac cv header stdlib h"
"$ac includes default"
if test "x$ac_cv_header_stdlib_h" = xyes; then :
 cat >>confdefs.h << ACEOF</pre>
#define HAVE STDLIB H 1
_ACEOF
fi
done
{ $as echo "$as me:${as lineno-$LINENO}: checking for GNU libc compatible malloc"
$as echo n "checking for GNU libc compatible malloc... " >&6; }
if ${ac_cv_func_malloc_0_nonnull+:} false; then :
 $as echo n "(cached) " >&6
else
 if test "$cross compiling" = yes; then :
 ac cv func malloc 0 nonnull=no
else
```

```
cat confdefs.h - << ACEOF >conftest.$ac ext
/* end confdefs.h. */
#if defined STDC_HEADERS || defined HAVE_STDLIB_H
# include <stdlib.h>
#else
char *malloc ();
#endif
int
main ()
{
return ! malloc (0);
 return 0;
}
ACEOF
if ac fn c try run "$LINENO"; then :
 ac cv func_malloc_0_nonnull=yes
else
  ac cv func malloc 0 nonnull=no
rm -f core *.core core.conftest.* gmon.out bb.out conftest$ac exeext \
 conftest.$ac objext conftest.beam conftest.$ac ext
fi
fi
{ $as_echo "$as_me:${as_lineno-$LINENO}: result: $ac_cv_func_malloc_0_nonnull"
>&5
$as_echo "$ac_cv_func_malloc_0_nonnull" >&6; }
if test $ac_cv_func_malloc_0_nonnull = yes; then :
$as echo "#define HAVE MALLOC 1" >>confdefs.h
else
  $as echo "#define HAVE MALLOC 0" >>confdefs.h
  case " $LIBOBJS " in
  *" malloc.$ac_objext "* ) ;;
  *) LIBOBJS="$LIBOBJS malloc.$ac objext"
 ;;
esac
```

```
$as echo "#define malloc rpl malloc" >>confdefs.h
fi
for ac func in bzero memset socket strtol
do:
  as ac var=`$as echo "ac cv func $ac func" | $as tr sh`
ac fn c check func "$LINENO" "$ac func" "$as ac var"
if eval test \"x\$"$as ac var"\" = x"yes"; then :
  cat >>confdefs.h << ACEOF
#define `$as echo "HAVE $ac func" | $as tr cpp` 1
ACEOF
fi
done
ac_config_files="$ac_config_files Makefile"
cat >confcache <<\ ACEOF
# This file is a shell script that caches the results of configure
# tests run on this system so they can be shared between configure
# scripts and configure runs, see configure's option --config-cache.
# It is not useful on other systems. If it contains results you don't
# want to keep, you may remove or edit it.
# config.status only pays attention to the cache file if you give it
# the --recheck option to rerun configure.
# `ac cv env foo' variables (set or unset) will be overridden when
# loading this file, other *unset* `ac cv foo' will be assigned the
# following values.
ACEOF
# The following way of writing the cache mishandles newlines in values,
# but we know of no workaround that is simple, portable, and efficient.
# So, we kill variables containing newlines.
```

```
# Ultrix sh set writes to stderr and can't be redirected directly,
# and sets the high bit in the cache file unless we assign to the vars.
  for ac var in `(set) 2 \ge 1 \mid sed -n 's/^([a-zA-Z][a-zA-Z0-9]*)=.*/^1/p'`; do
   eval ac val=\$$ac var
   case $ac val in #(
    *${as nl}*)
     case $ac var in #(
      *_cv_*) { $as_echo "$as_me:${as_lineno-$LINENO}: WARNING: cache variable
$ac var contains a newline" >&5
$as echo "$as me: WARNING: cache variable $ac var contains a newline" >&2;} ;;
     esac
     case $ac var in #(
     _ | IFS | as_nl) ;; #(
     BASH ARGV | BASH SOURCE) eval $ac var= ;; #(
     *) { eval $ac var=; unset $ac var;} ;;
     esac ;;
   esac
  done
  (set) 2>&1 |
    case $as nl`(ac space=' '; set) 2>&1` in #(
    *${as nl}ac space=\ *)
      # `set' does not quote correctly, so add quotes: double-quote
      # substitution turns \\\\ into \\, and sed turns \\ into \.
     sed -n \
     "s/'/\\\\''/q;
       s/^{([ sas cr alnum]* cv [ sas cr alnum]*/)=/(.*/)//1='/2'/p"}
     ;; #(
      # `set' quotes correctly as required by POSIX, so do not add quotes.
      sed -n "/^[ as cr alnum + cv [ as cr alnum +=/p"
     ;;
    esac |
    sort
) |
 sed '
    /^ac cv env /b end
    t clear
    :clear
     s/^{([^=]*)}=(.*[{}].*)$/test "${\1+set}" = set || &/
```

```
t end
     s/^{([^=]*)} = (.*) $/1=${1=2}/
     :end' >>confcache
if diff "$cache file" confcache >/dev/null 2>&1; then :; else
  if test -w "$cache file"; then
    if test "x$cache file" != "x/dev/null"; then
      { $as echo "$as me:{as lineno-$LINENO}: updating cache $cache file" > 65
$as echo "$as me: updating cache $cache file" >&6;}
      if test ! -f "$cache_file" || test -h "$cache_file"; then
     cat confcache >"$cache file"
     else
       case $cache file in #(
       */* | ?:*)
       mv -f confcache "$cache file"$$ &&
       mv -f "$cache file"$$ "$cache file";; #(
       *)
       mv -f confcache "$cache file" ;;
     esac
      fi
    fi
  else
    { $as echo "$as me:${as lineno-$LINENO}: not updating unwritable cache
$cache file" >&5
$as echo "$as me: not updating unwritable cache $cache file" >&6;}
  fi
rm -f confcache
test "x$prefix" = xNONE && prefix=$ac default prefix
# Let make expand exec prefix.
test "x$exec prefix" = xNONE && exec prefix='${prefix}'
DEFS=-DHAVE CONFIG H
ac libobjs=
ac ltlibobjs=
U=
for ac i in : $LIBOBJS; do test "x$ac i" = x: && continue
  # 1. Remove the extension, and $U if already installed.
 ac script='s/\$U\././;s/\.o$//;s/\.obj$//'
  ac i=`$as echo "$ac i" | sed "$ac script"`
```

```
# 2. Prepend LIBOBJDIR. When used with automake>=1.10 LIBOBJDIR
      will be set to the directory where LIBOBJS objects are built.
 as fn append ac libobjs " \${LIBOBJDIR}$ac i\$U.$ac objext"
 as_fn_append ac_ltlibobjs " \ LIBOBJDIR}$ac i"'$U.lo'
LIBOBJS=$ac libobjs
LTLIBOBJS=$ac ltlibobjs
: "${CONFIG STATUS=./config.status}"
ac write fail=0
ac clean files save=$ac clean files
ac clean files="$ac clean files $CONFIG STATUS"
{ $as echo "$as me:{as lineno-$LINENO}: creating $CONFIG STATUS" >&5
$as echo "$as me: creating $CONFIG STATUS" >&6;}
as write fail=0
cat >$CONFIG STATUS << ASEOF || as write fail=1
#! $SHELL
# Generated by $as me.
# Run this file to recreate the current configuration.
# Compiler output produced by configure, useful for debugging
# configure, is in config.log if it exists.
debug=false
ac_cs_recheck=false
ac cs silent=false
SHELL=\${CONFIG SHELL-$SHELL}
export SHELL
ASEOF
cat >>$CONFIG_STATUS <<\_ASEOF || as_write_fail=1</pre>
## ----- ##
## M4sh Initialization. ##
## ----- ##
# Be more Bourne compatible
DUALCASE=1; export DUALCASE # for MKS sh
if test -n "{ZSH VERSION+set}" && (emulate sh) >/dev/null 2>&1; then :
 emulate sh
```

```
NULLCMD=:
  # Pre-4.2 versions of Zsh do word splitting on ${1+"$@"}, which
  # is contrary to our usage. Disable this feature.
 alias -g '${1+"$@"}'='"$@"'
 setopt NO GLOB SUBST
 case `(set -o) 2>/dev/null` in #(
 *posix*) :
   set -o posix ;; #(
    ;;
esac
fi
as nl='
export as nl
# Printing a long string crashes Solaris 7 /usr/bin/printf.
as echo=$as echo$as echo$as echo$as echo
as echo=$as echo$as echo$as echo$as echo$as echo
# Prefer a ksh shell builtin over an external printf program on Solaris,
# but without wasting forks for bash or zsh.
if test -z "$BASH VERSION$ZSH VERSION" \
   && (test "X`print -r -- as_echo'' = "X$as_echo'') 2>/dev/null; then
 as echo='print -r --'
 as echo n='print -rn --'
elif (test "X`printf %s $as echo`" = "X$as echo") 2>/dev/null; then
 as echo='printf %s\n'
 as echo n='printf %s'
else
 if test "X`(/usr/ucb/echo -n -n as echo) 2>/dev/null`" = "X-n <math>ae cho; then
   as echo body='eval /usr/ucb/echo -n "$1$as nl"'
   as echo n='/usr/ucb/echo -n'
 else
   as echo body='eval expr "X$1" : "X\(.*\\\)"'
   as echo n body='eval
     arg=$1;
     case $arg in #(
```

```
*"$as nl"*)
      expr "X$arg" : "X\\(.*\\)$as nl";
      arg=`expr "X$arg" : ".*$as nl\\(.*\\)"`;;
      expr "X arg" : "X \setminus (.* \setminus)" | tr -d "$as nl"
    export as echo n body
    as echo n='sh -c $as echo n body as echo'
  fi
  export as echo body
  as echo='sh -c $as echo body as echo'
fi
# The user is always right.
if test "${PATH SEPARATOR+set}" != set; then
  PATH SEPARATOR=:
  (PATH='/bin;/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 && {
    (PATH='/bin:/bin'; FPATH=$PATH; sh -c :) >/dev/null 2>&1 ||
      PATH SEPARATOR=';'
  }
fi
# IFS
# We need space, tab and new line, in precisely that order. Quoting is
# there to prevent editors from complaining about space-tab.
# (If AS PATH WALK were called with IFS unset, it would disable word
# splitting by setting IFS to empty value.)
IFS=" ""
          $as nl"
# Find who we are. Look in the path if we contain no directory separator.
as myself=
case $0 in #((
  *[\]' as myself=$0 ;;
  *) as save IFS=$IFS; IFS=$PATH SEPARATOR
for as dir in $PATH
do
  IFS=$as save IFS
  test -z "$as dir" && as dir=.
    test -r "$as dir/$0" && as myself=$as dir/$0 && break
  done
```

```
IFS=$as save IFS
     ;;
esac
# We did not find ourselves, most probably we were run as `sh COMMAND'
# in which case we are not to be found in the path.
if test "x$as myself" = x; then
 as myself=$0
if test ! -f "$as myself"; then
  $as echo "$as myself: error: cannot find myself; rerun with an absolute file
name" >&2
 exit 1
fi
# Unset variables that we do not need and which cause bugs (e.g. in
\# pre-3.0 UWIN ksh). But do not cause bugs in bash 2.01; the "\|\cdot\| exit 1"
# suppresses any "Segmentation fault" message there. '((' could
# trigger a bug in pdksh 5.2.14.
for as_var in BASH_ENV ENV MAIL MAILPATH
do eval test x\{$as var+set} = xset \
  && ( (unset $as var) || exit 1) >/dev/null 2>&1 && unset $as var || :
done
PS1='$ '
PS2='> '
PS4='+ '
# NLS nuisances.
LC ALL=C
export LC ALL
LANGUAGE=C
export LANGUAGE
# CDPATH.
(unset CDPATH) >/dev/null 2>&1 && unset CDPATH
# as_fn_error STATUS ERROR [LINENO LOG_FD]
# -----
# Output "`basename $0`: error: ERROR" to stderr. If LINENO and LOG FD are
# provided, also output the error to LOG FD, referencing LINENO. Then exit the
```

```
# script with STATUS, using 1 if that was 0.
as fn error ()
{
 as status=$1; test $as status -eq 0 && as status=1
 if test "$4"; then
   as lineno=${as_lineno-"$3"} as_lineno_stack=as_lineno_stack=$as_lineno_stack
   a = cho "$as me:${as lineno-$LINENO}: error: $2" >&$4
  fi
  $as_echo "$as_me: error: $2" >&2
 as fn exit $as status
} # as fn error
# as fn set status STATUS
# -----
# Set $? to STATUS, without forking.
as fn set status ()
 return $1
} # as_fn_set_status
# as fn exit STATUS
# -----
# Exit the shell with STATUS, even in a "trap 0" or "set -e" context.
as fn exit ()
 set +e
 as fn set status $1
 exit $1
} # as fn exit
# as_fn_unset VAR
# -----
# Portably unset VAR.
as fn unset ()
{
  { eval $1=; unset $1;}
as_unset=as_fn_unset
# as fn append VAR VALUE
# -----
```

```
# Append the text in VALUE to the end of the definition contained in VAR. Take
# advantage of any shell optimizations that allow amortized linear growth over
# repeated appends, instead of the typical quadratic growth present in naive
# implementations.
if (eval "as var=1; as var+=2; test x var = x12") 2/dev/null; then :
  eval 'as fn append ()
  {
   eval $1+=\$2
  } '
else
 as fn append ()
   eval 1=\$1\$2
fi # as fn append
# as fn arith ARG...
# -----
# Perform arithmetic evaluation on the ARGs, and store the result in the
# global $as val. Take advantage of shells that can avoid forks. The arguments
# must be portable across $(()) and expr.
if (eval "test \((1 + 1 )) = 2") 2>/dev/null; then :
 eval 'as_fn_arith ()
   as val=$(( $* ))
  } '
else
  as fn arith ()
    as_val=`expr "$@" || test $? -eq 1`
  }
fi # as fn arith
if expr a : '\(a\)' >/dev/null 2>&1 &&
   test "X`expr 00001 : '.*\(...\)'`" = X001; then
 as expr=expr
else
  as expr=false
fi
```

```
if (basename -- /) >/dev/null 2>&1 && test "X`basename -- / 2>&1`" = "X/"; then
  as basename=basename
else
  as basename=false
fi
if (as dir=`dirname -- /` && test "X$as dir" = X/) >/dev/null 2>&1; then
  as dirname=dirname
else
  as dirname=false
fi
as me=`$as basename -- "$0" ||
$as expr X/"$0" : '.*/\([^/][^/]*\)/*$' \| \
       X"$0" : 'X(//)$' | 
       X"$0" : 'X\(/\)' \ \ . 2>/dev/null ||
$as echo X/"$0" |
    sed '/^.*\/\([^/][^/]*\)\/*$/{
         s//\1/
          q
        /^X\/\(\/\/\)$/{
         s//\1/
         q
        /^X\/\(\/\).*/{
         s//\1/
         q
        s/.*/./; q'`
# Avoid depending upon Character Ranges.
as cr letters='abcdefghijklmnopqrstuvwxyz'
as cr LETTERS='ABCDEFGHIJKLMNOPQRSTUVWXYZ'
as cr Letters=$as cr letters$as cr LETTERS
as cr digits='0123456789'
as cr alnum=$as cr Letters$as cr digits
ECHO C= ECHO N= ECHO T=
case `echo -n x` in \#(((((
-n*)
```

```
case `echo 'xy\c'` in
  *c*) ECHO T=' ';;  # ECHO T is single tab character.
  xy) ECHO C='\c';;
      echo `echo ksh88 bug on AIX 6.1` > /dev/null
      ECHO T=' ';;
  esac;;
 ECHO N='-n';;
esac
rm -f conf$$ conf$$.exe conf$$.file
if test -d conf$$.dir; then
 rm -f conf$$.dir/conf$$.file
else
 rm -f conf$$.dir
 mkdir conf$$.dir 2>/dev/null
if (echo >conf$$.file) 2>/dev/null; then
  if ln -s conf$$.file conf$$ 2>/dev/null; then
   as ln s='ln -s'
    # ... but there are two gotchas:
    # 1) On MSYS, both `ln -s file dir' and `ln file dir' fail.
    # 2) DJGPP < 2.04 has no symlinks; `ln -s' creates a wrapper executable.
    # In both cases, we have to default to `cp -pR'.
    ln -s conf$$.file conf$$.dir 2>/dev/null && test ! -f conf$$.exe ||
      as ln s='cp -pR'
  elif ln conf$$.file conf$$ 2>/dev/null; then
   as ln s=ln
  else
   as ln s='cp -pR'
  fi
else
 as ln s='cp -pR'
fi
rm -f conf$$ conf$$.exe conf$$.dir/conf$$.file conf$$.file
rmdir conf$$.dir 2>/dev/null
# as fn mkdir p
# -----
# Create "$as dir" as a directory, including parents if necessary.
```

```
as fn mkdir p ()
 case $as dir in #(
 -*) as_dir=./$as_dir;;
  test -d "$as_dir" || eval $as_mkdir_p || {
   as_dirs=
   while :; do
      case $as dir in #(
      *\'*) as_qdir=`$as_echo "$as_dir" | sed "s/'/'\\\\\''/g"`;; #'(
      *) as_qdir=$as_dir;;
      esac
      as dirs="'$as qdir' $as dirs"
      as dir=`$as dirname -- "$as dir" ||
$as expr X"$as dir" : 'X\(.*[^/]\)//*[^/][^/]*/*$' \| \
       X"$as dir" : 'X\setminus (//\setminus)[^/]'\setminus 
       X"$as_dir" : 'X\(//\)$' \| \
       X"$as_dir" : 'X\setminus (/\setminus)' \| . 2>/dev/null ||
$as echo X"$as_dir" |
    sed '/^X\(.*[^/]\) ///*[^/][^/]*//*$/{
          s//\1/
          q
        /^X\(\/\\)[^/].*/{
          s//\1/
          q
        /^X\(\/\/)$/{
          s//\1/
          q
        /^X\(\/\).*/{
          s//\1/
          q
        }
        s/.*/./; q'`
      test -d "$as dir" && break
    test -z "$as dirs" || eval "mkdir $as dirs"
  } || test -d "$as dir" || as fn error $? "cannot create directory $as dir"
```

```
} # as fn mkdir p
if mkdir -p . 2>/dev/null; then
 as mkdir p='mkdir -p "$as dir"'
 test -d ./-p && rmdir ./-p
 as mkdir p=false
fi
# as fn executable p FILE
# -----
# Test if FILE is an executable regular file.
as fn executable p ()
 test -f "$1" && test -x "$1"
} # as fn executable p
as test x='test -x'
as_executable_p=as_fn_executable_p
# Sed expression to map a string onto a valid CPP name.
as tr cpp="eval sed 'y%*$as cr letters%P$as cr LETTERS%;s%[^ $as cr alnum]% %g'"
# Sed expression to map a string onto a valid variable name.
as tr sh="eval sed 'y%*+%pp%;s%[^ $as cr alnum]% %g'"
exec 6>&1
## ----- ##
## Main body of $CONFIG STATUS script. ##
## ----- ##
ASEOF
test $as_write_fail = 0 && chmod +x $CONFIG STATUS || ac write fail=1
cat >>$CONFIG STATUS <<\ ACEOF || ac write fail=1</pre>
# Save the log message, to keep $0 and so on meaningful, and to
# report actual input values of CONFIG FILES etc. instead of their
# values after options handling.
ac log="
This file was extended by FULL-PACKAGE-NAME $as me VERSION, which was
```

```
generated by GNU Autoconf 2.69. Invocation command line was
  CONFIG FILES = $CONFIG FILES
  CONFIG HEADERS = $CONFIG HEADERS
  CONFIG LINKS = $CONFIG LINKS
  CONFIG COMMANDS = $CONFIG COMMANDS
  $ $0 $@
on `(hostname || uname -n) 2>/dev/null | sed 1q`
ACEOF
case $ac config files in *"
"*) set x $ac config files; shift; ac config files=$*;;
esac
case $ac config headers in *"
"*) set x $ac config headers; shift; ac config headers=$*;;
esac
cat >>$CONFIG STATUS << ACEOF || ac write fail=1
# Files that config.status was made for.
config files="$ac config files"
config headers="$ac config headers"
ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1</pre>
ac cs usage="\
\`$as me' instantiates files and other configuration actions
from templates according to the current configuration. Unless the files
and actions are specified as TAGs, all are instantiated by default.
Usage: $0 [OPTION]... [TAG]...
             print this help, then exit
  -h, --help
                 print version number and configuration settings, then exit
  -V, --version
                 print configuration, then exit
  -q, --quiet, --silent
```

```
do not print progress messages
  -d, --debug
                   don't remove temporary files
                   update $as me by reconfiguring in the same conditions
      --recheck
      --file=FILE[:TEMPLATE]
                   instantiate the configuration file FILE
      --header=FILE[:TEMPLATE]
                   instantiate the configuration header FILE
Configuration files:
$config files
Configuration headers:
$config headers
Report bugs to <BUG-REPORT-ADDRESS>."
ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1</pre>
                          "$ac configure args" | sed 's/^ //;
ac cs config="`$as echo
s/[\\""\`\$]/\\\&/g'`"
ac cs version="\\
FULL-PACKAGE-NAME config.status VERSION
configured by $0, generated by GNU Autoconf 2.69,
  with options \\"\\ac cs config\\"
Copyright (C) 2012 Free Software Foundation, Inc.
This config.status script is free software; the Free Software Foundation
gives unlimited permission to copy, distribute and modify it."
ac pwd='$ac pwd'
srcdir='$srcdir'
test -n "\$AWK" || AWK=awk
ACEOF
cat >>$CONFIG STATUS <<\ ACEOF || ac write fail=1</pre>
# The default lists apply if the user does not specify any file.
ac need defaults=:
while test $\# != 0
 case $1 in
  --*=?*)
```

```
ac option=`expr "X$1" : 'X\([^=]*\)='`
  ac optarg=`expr "X$1" : 'X[^=]*=\(.*\)'`
  ac shift=:
  ;;
--*=)
 ac option=`expr "X$1" : 'X\([^=]*\)='`
 ac_optarg=
 ac shift=:
  ;;
*)
 ac option=$1
 ac optarg=$2
 ac shift=shift
  ;;
esac
case $ac option in
# Handling of the options.
-recheck | --recheck | --rechec | --reche | --rech | --rec | --re
  ac cs recheck=: ;;
--version | --versio | --versi | --ver | --ver | --ve | --v | -V )
  $as echo "$ac cs version"; exit ;;
--config | --confi | --conf | --con | --co | --c )
  $as echo "$ac cs config"; exit ;;
--debug | --debu | --deb | --de | --d | -d )
  debug=: ;;
--file | --fil | --fi | --f )
  $ac shift
  case $ac optarg in
  *\'*) ac optarg=`$as echo "$ac optarg" | sed "s/'/'\\\\\''/g"` ;;
  '') as fn error $? "missing file argument" ;;
  esac
 as fn append CONFIG FILES " '$ac optarg'"
  ac need defaults=false;;
--header | --heade | --head | --hea )
  $ac shift
  case $ac optarg in
  *\'*) ac optarg=`$as echo "$ac optarg" | sed "s/'/'\\\\\''/g"` ;;
  as fn append CONFIG HEADERS " '$ac optarg'"
  ac need defaults=false;;
```

```
--he | --h)
    # Conflict between --help and --header
    as fn error $? "ambiguous option: \`$1'
Try \`$0 --help' for more information.";;
  --help | --hel | -h )
    $as echo "$ac cs usage"; exit ;;
  -q | -quiet | --quiet | --qui | --qu | --q \
  | -silent | --silent | --silen | --sile | --sil | --si | --s)
   ac_cs_silent=: ;;
  # This is an error.
  -*) as_fn_error $? "unrecognized option: \`$1'
Try \`$0 --help' for more information." ;;
  *) as fn append ac config targets " $1"
     ac need defaults=false ;;
  esac
  shift
done
ac configure extra args=
if $ac cs silent; then
 exec 6>/dev/null
 ac configure extra args="$ac configure extra args --silent"
fi
ACEOF
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1</pre>
if \$ac cs recheck; then
  set X $SHELL '$0' $ac_configure_args \$ac_configure_extra_args --no-create --
no-recursion
  shift
  \$as echo "running CONFIG SHELL=$SHELL \$*" >&6
 CONFIG SHELL='$SHELL'
 export CONFIG SHELL
 exec "\$@"
fi
ACEOF
```

```
cat >>$CONFIG STATUS <<\ ACEOF || ac write fail=1
exec 5>>config.log
{
  echo
  sed 'h;s/./-/g;s/^.../## /;s/...$/ ##/;p;x;p;x' <<_ASBOX
## Running $as me. ##
ASBOX
  $as echo "$ac log"
} >&5
ACEOF
cat >>$CONFIG STATUS << ACEOF || ac write fail=1
ACEOF
cat >>$CONFIG STATUS <<\ ACEOF || ac write fail=1</pre>
# Handling of arguments.
for ac config target in $ac config targets
do
  case $ac config target in
    "config.h") CONFIG HEADERS="$CONFIG HEADERS config.h" ;;
    "Makefile") CONFIG FILES="$CONFIG_FILES Makefile" ;;
  *) as fn error $? "invalid argument: \`$ac config target'" "$LINENO" 5;;
  esac
done
# If the user did not use the arguments to specify the items to instantiate,
# then the envvar interface is used. Set only those that are not.
\# We use the long form for the default assignment because of an extremely
# bizarre bug on SunOS 4.1.3.
if $ac need defaults; then
  test "${CONFIG FILES+set}" = set || CONFIG_FILES=$config_files
  test "${CONFIG HEADERS+set}" = set || CONFIG HEADERS=$config headers
fi
# Have a temporary directory for convenience. Make it in the build tree
# simply because there is no reason against having it here, and in addition,
# creating and moving files from /tmp can sometimes cause problems.
# Hook for its removal unless debugging.
```

```
# Note that there is a small window in which the directory will not be cleaned:
# after its creation but before its name has been assigned to `$tmp'.
$debug ||
 tmp= ac tmp=
 trap 'exit status=$?
 : "${ac tmp:=$tmp}"
 { test ! -d "$ac_tmp" || rm -fr "$ac_tmp"; } && exit $exit_status
  trap 'as fn exit 1' 1 2 13 15
# Create a (secure) tmp directory for tmp files.
{
 tmp=`(umask 077 && mktemp -d "./confXXXXXX") 2>/dev/null` &&
 test -d "$tmp"
} | |
  tmp=./conf$$-$RANDOM
  (umask 077 && mkdir "$tmp")
} || as fn error $? "cannot create a temporary directory in ." "$LINENO" 5
ac tmp=$tmp
# Set up the scripts for CONFIG FILES section.
# No need to generate them if there are no CONFIG FILES.
# This happens for instance with `./config.status config.h'.
if test -n "$CONFIG FILES"; then
ac cr=`echo X | tr X '\015'`
# On cygwin, bash can eat \r inside `` if the user requested ignor.
# But we know of no other shell where ac cr would be empty at this
# point, so we can use a bashism as a fallback.
if test "xac cr" = x; then
 eval ac cr=\\'\\r\'
fi
ac cs awk cr=`$AWK 'BEGIN { print "a\rb" }' </dev/null 2>/dev/null`
if test "$ac cs awk cr" = "a${ac cr}b"; then
  ac cs awk cr='\\r'
else
  ac cs awk cr=$ac cr
```

fi

```
echo 'BEGIN {' > "$ac tmp/subs1.awk" &&
ACEOF
  echo "cat >conf$$subs.awk << ACEOF" &&
  echo "$ac_subst_vars" | sed 's/.*/&!$&$ac_delim/' &&
 echo " ACEOF"
} >conf$$subs.sh ||
  as fn error $? "could not make $CONFIG STATUS" "$LINENO" 5
ac delim num=`echo "$ac subst vars" | grep -c '^'`
ac delim='%! !# '
for ac last try in false false false false false :; do
  . ./conf$$subs.sh ||
   as fn error $? "could not make $CONFIG STATUS" "$LINENO" 5
  ac delim n= sed -n "s/.*$ac delim\$/X/p" conf$$subs.awk | grep -c X`
  if test $ac_delim_n = $ac_delim_num; then
   break
  elif $ac last try; then
    as_fn_error $? "could not make $CONFIG STATUS" "$LINENO" 5
  else
   ac delim="$ac delim!$ac delim $ac delim!!"
  fi
done
rm -f conf$$subs.sh
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1</pre>
cat >>"\$ac tmp/subs1.awk" <<\\_ACAWK &&
ACEOF
sed -n '
s/^/S["/; s/!.*/"]=/
s/^[^!]*!//
:repl
t repl
s/'"$ac delim"'$//
```

```
t delim
:nl
h
s/\(.\{148\}\)..*/\1/
t more1
s/["\\]/\\&/q; s/^/"/; s/$/\\n"\\/
n
b repl
:more1
s/["\\]/\\&/g; s/^/"/; s/$/"\\/
р
s/.\{148\}//
t nl
:delim
s/\(.\{148\}\)..*/\1/
t more2
s/["\\]/\\&/g; s/^/"/; s/$/"/
р
b
:more2
s/["\\]/\\&/q; s/^/"/; s/$/"\\/
р
s/. \{148\} / /
t delim
' <conf$$subs.awk | sed '</pre>
/^[^""]/{
  Ν
  s/\n//
' >>$CONFIG STATUS || ac write fail=1
rm -f conf$$subs.awk
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1</pre>
ACAWK
cat >>"\$ac tmp/subs1.awk" << ACAWK &&</pre>
 for (key in S) S_is_set[key] = 1
  FS = "
```

```
}
  line = $0
  nfields = split(line, field, "@")
  substed = 0
  len = length(field[1])
  for (i = 2; i < nfields; i++) {
   key = field[i]
    keylen = length(key)
    if (S is set[key]) {
     value = S[key]
      line = substr(line, 1, len) "" value "" substr(line, len + keylen + 3)
      len += length(value) + length(field[++i])
      substed = 1
    } else
      len += 1 + keylen
  }
  print line
}
ACAWK
_ACEOF
cat >>$CONFIG_STATUS <<\_ACEOF || ac_write_fail=1</pre>
if sed "s/ac cr//" < /dev/null > /dev/null 2>&1; then
  sed "s/$ac_cr\$//; s/$ac_cr/$ac_cs_awk_cr/g"
else
  cat
fi < "$ac tmp/subs1.awk" > "$ac tmp/subs.awk" \
  || as fn error $? "could not setup config files machinery" "$LINENO" 5
ACEOF
# VPATH may cause trouble with some makes, so we remove sole $(srcdir),
# ${srcdir} and @srcdir@ entries from VPATH if srcdir is ".", strip leading and
# trailing colons and then remove the whole line if VPATH becomes empty
# (actually we leave an empty line to preserve line numbers).
if test "x$srcdir" = x.; then
  ac vpsub='/^[ ]*VPATH[ ]*=[ ]*/{
h
s///
```

```
s/^/:/
s/[
     ]*$/:/
s/:\$(srcdir):/:/q
s/:\${srcdir}:/:/g
s/:@srcdir@:/:/q
s/^:*//
s/:*$//
        ]*\).*/\1/
s/\(=[
s/\n//
s/^[^=]*=[ ]*$//
} '
fi
cat >>$CONFIG STATUS << \ ACEOF || ac write fail=1
fi # test -n "$CONFIG FILES"
# Set up the scripts for CONFIG HEADERS section.
# No need to generate them if there are no CONFIG HEADERS.
# This happens for instance with `./config.status Makefile'.
if test -n "$CONFIG HEADERS"; then
cat >"$ac tmp/defines.awk" <<\ ACAWK ||</pre>
BEGIN {
ACEOF
# Transform confdefs.h into an awk script `defines.awk', embedded as
# here-document in config.status, that substitutes the proper values into
# config.h.in to produce config.h.
# Create a delimiter string that does not exist in confdefs.h, to ease
# handling of long lines.
ac delim='%! !# '
for ac last try in false false :; do
  ac tt=`sed -n "/$ac delim/p" confdefs.h`
  if test -z "$ac tt"; then
   break
  elif $ac last try; then
    as fn error $? "could not make $CONFIG HEADERS" "$LINENO" 5
  else
    ac delim="$ac delim!$ac delim $ac delim!!"
```

```
fi
done
# For the awk script, D is an array of macro values keyed by name,
# likewise P contains macro parameters if any. Preserve backslash
# newline sequences.
ac word re=[ $as cr Letters][ $as cr alnum]*
sed -n '
s/.\{148}\/&'"$ac delim"'/g
t rset
:rset
s/^[ ]*#[ ]*define[ ][ ]*/ /
t def
d
:def
s/\\$//
t bsnl
s/["\\]/\\&/g
s/^ ('"$ac_word_re"'))(([^()]*))[ ]*(.*\)/P["\1"]="\2"\
D["\1"] = "\3"/p
s/^ ('"$ac word re"')[ ]*(.*\)/D["\1"]=" \2"/p
:bsnl
s/["\\]/\\&/g
s/^ ('"$ac word re"'))(([^()]*))[ ]*(.*\)/P["\1"]="\2"\
D["\1"] = "\3\\\\\
t cont
s/^ ('"$ac word re"')[ ]*(.*\)/D["\1"]=" \2\\\\n"\/p
t cont
d
:cont
s/.\{148\}/\&'"$ac delim"'/g
t clear
:clear
s/\\$//
t bsnlc
s/["\\]/\\&/q; s/^/"/; s/$/"/p
:bsnlc
```

```
s/["\\]/\\&/g; s/^/"/; s/$/\\\\n"\\/p
b cont
' <confdefs.h | sed '
s/'"$ac delim"'/"\\\
"/g' >>$CONFIG_STATUS || ac_write_fail=1
cat >>$CONFIG_STATUS <<_ACEOF || ac_write_fail=1</pre>
  for (\text{key in D}) D is \text{set}[\text{key}] = 1
 FS = "
}
/^[\t] * \#[\t] * (define|undef)[\t] + ac word re([\t(]|\s)/ {
  line = \ 0
  split(line, arg, " ")
  if (arg[1] == "#") {
   defundef = arg[2]
   mac1 = arg[3]
  } else {
    defundef = substr(arg[1], 2)
   mac1 = arg[2]
  split(mac1, mac2, "(") #)
  macro = mac2[1]
  prefix = substr(line, 1, index(line, defundef) - 1)
  if (D is set[macro]) {
    # Preserve the white space surrounding the "#".
    print prefix "define", macro P[macro] D[macro]
    next
  } else {
    # Replace #undef with comments. This is necessary, for example,
    # in the case of POSIX SOURCE, which is predefined and required
    # on some systems where configure will not decide to define it.
    if (defundef == "undef") {
     print "/*", prefix defundef, macro, "*/"
     next
    }
  }
{ print }
ACAWK
ACEOF
```

```
cat >>$CONFIG STATUS <<\ ACEOF || ac write fail=1
  as_fn_error $? "could not setup config headers machinery" "$LINENO" 5
fi # test -n "$CONFIG HEADERS"
eval set X " :F $CONFIG FILES :H $CONFIG HEADERS
shift
for ac tag
do
  case $ac tag in
  :[FHLC]) ac mode=$ac tag; continue;;
  esac
  case $ac mode$ac tag in
  :[FHL]*:*);;
  :L* | :C*:*) as fn error ? "invalid tag \`$ac tag'" "$LINENO" 5;;
  :[FH]-) ac tag=-:-;;
  :[FH]*) ac tag=$ac tag:$ac tag.in;;
  esac
  ac save IFS=$IFS
  IFS=:
  set x $ac tag
  IFS=$ac save IFS
  shift
  ac file=$1
  shift
  case $ac_mode in
  :L) ac source=$1;;
  :[FH])
   ac_file_inputs=
   for ac f
    do
     case $ac f in
      -) ac f="$ac tmp/stdin";;
      *) # Look for the file first in the build tree, then in the source tree
       # (if the path is not absolute). The absolute path cannot be DOS-style,
       # because $ac f cannot contain `:'.
      test -f "$ac f" ||
        case $ac f in
        [\\/$]*) false;;
         *) test -f "$srcdir/$ac_f" && ac_f="$srcdir/$ac_f";;
```

```
esac ||
        as fn error 1 "cannot find input file: \`$ac f'" "$LINENO" 5;;
      esac
     case ac f in *\''*) ac f=\ac f'' | sed "s/'/'\\\\''/g"\;; esac
     as fn append ac file inputs " '$ac f'"
    done
    # Let's still pretend it is `configure' which instantiates (i.e., don't
    # use $as me), people would be surprised to read:
       /* config.h. Generated by config.status. */
   configure input='Generated from '`
        $as echo "$*" | sed 's|^[^:]*/||;s|:[^:]*/|, |g'
      `' by configure.'
    if test x"$ac file" != x-; then
     configure input="$ac file. $configure input"
      { $as echo "$as me:{as lineno-$LINENO}: creating $ac file" >&5
$as_echo "$as_me: creating $ac_file" >&6;}
    # Neutralize special characters interpreted by sed in replacement strings.
    case $configure input in #(
    *\&* | *\|* | *\\* )
       ac sed conf input=`$as echo "$configure input" |
       sed 's/[\\\&|]/\\\&/g'`;; #(
    *) ac sed conf input=$configure input;;
   esac
   case $ac_tag in
    *:-:* | *:-) cat >"$ac tmp/stdin" \
      || as fn error $? "could not create $ac file" "$LINENO" 5 ;;
    esac
    ;;
  esac
 ac dir=`$as dirname -- "$ac file" ||
$as expr X"$ac file" : 'X\(.*[^/]\)//*[^/][^/]*/*$' \| \
      X"$ac file" : 'X\setminus(//\setminus)[^/]'\setminus
      X"$ac file" : 'X\(//\)$' \| \
      X"$ac file" : 'X\(/\)' \| . 2>/dev/null ||
$as echo X"$ac file" |
    sed '/^X(.*[^/]))//*[^/][^/]*//*$/{
         s//\1/
```

```
q
        }
        /^X\(\/\\)[^/].*/{
         s//\1/
          q
        /^X\(\/\/)$/{
          s//\1/
         q
        /^X\(\/\).*/{
         s//\1/
          q
        s/.*/./; q'`
  as dir="$ac dir"; as fn mkdir p
  ac builddir=.
case "$ac dir" in
.) ac_dir_suffix= ac_top_builddir_sub=. ac_top_build_prefix= ;;
  ac dir suffix=/`\$as echo "\\$ac dir" | sed |s|^{...}
  # A ".." for each directory in $ac dir suffix.
  ac top builddir sub=`$as echo "$ac dir suffix" | sed 's|/[^\/]*|/..|g;s|/||'`
 case $ac top builddir sub in
  "") ac top builddir sub=. ac top build prefix= ;;
  *) ac_top_build_prefix=$ac_top_builddir_sub/;;
  esac ;;
esac
ac abs top builddir=$ac pwd
ac abs builddir=$ac pwd$ac dir suffix
# for backward compatibility:
ac top builddir=$ac top build prefix
case $srcdir in
  .) # We are building in place.
   ac srcdir=.
   ac top srcdir=$ac top builddir sub
    ac abs top srcdir=$ac pwd ;;
  [\]^* | ?:[\]^* ) \# Absolute name.
    ac srcdir=$srcdir$ac dir suffix;
```

```
ac top srcdir=$srcdir
    ac_abs_top_srcdir=$srcdir ;;
  *) # Relative name.
    ac srcdir=$ac top build prefix$srcdir$ac dir suffix
    ac top_srcdir=$ac_top_build_prefix$srcdir
    ac abs top srcdir=$ac pwd/$srcdir ;;
esac
ac abs srcdir=$ac abs top srcdir$ac dir suffix
  case $ac mode in
  :F)
  # CONFIG FILE
ACEOF
cat >>$CONFIG STATUS << \ ACEOF || ac write fail=1
# If the template does not know about datarootdir, expand it.
# FIXME: This hack should be removed a few years after 2.60.
ac datarootdir hack=; ac datarootdir seen=
ac sed dataroot='
/datarootdir/ {
 р
  q
/@datadir@/p
/@docdir@/p
/@infodir@/p
/@localedir@/p
/@mandir@/p'
case `eval "sed -n \"\$ac sed dataroot\" $ac file inputs"` in
*datarootdir*) ac datarootdir seen=yes;;
*@datadir@*|*@docdir@*|*@infodir@*|*@localedir@*|*@mandir@*)
  { $as echo "$as me:${as lineno-$LINENO}: WARNING: $ac file inputs seems to
ignore the --datarootdir setting" >&5
$as echo "$as me: WARNING: $ac file inputs seems to ignore the --datarootdir
setting" >&2;}
ACEOF
cat >>$CONFIG STATUS << ACEOF || ac write fail=1
```

```
ac datarootdir hack='
  s&@datadir@&$datadir&g
  s&@docdir@&$docdir&g
  s&@infodir@&$infodir&g
  s&@localedir@&$localedir&g
  s&@mandir@&$mandir&q
  s&\\\${datarootdir}&$datarootdir&g';;
esac
ACEOF
# Neutralize VPATH when `$srcdir' = `.'.
# Shell code in configure.ac might set extrasub.
# FIXME: do we really want to maintain this feature?
cat >>$CONFIG STATUS <<_ACEOF || ac_write_fail=1</pre>
ac sed extra="$ac vpsub
$extrasub
ACEOF
cat >>$CONFIG STATUS <<\ ACEOF || ac write fail=1
/@[a-zA-Z][a-zA-Z 0-9]*@/!b
s|@configure input@|$ac sed conf input|;t t
s&@top builddir@&$ac top builddir sub&;t t
s&@top build prefix@&$ac top build prefix&;t t
s&@srcdir@&$ac srcdir&;t t
s&@abs srcdir@&$ac abs srcdir&;t t
s&@top srcdir@&$ac top srcdir&;t t
s&@abs_top_srcdir@&$ac_abs_top_srcdir&;t t
s&@builddir@&$ac builddir&;t t
s&@abs builddir@&$ac abs builddir&;t t
s&@abs top builddir&&ac abs top builddir&;t t
$ac datarootdir hack
eval sed \"\$ac sed extra\" "$ac file inputs" | $AWK -f "$ac tmp/subs.awk" \
  >$ac tmp/out || as fn error $? "could not create $ac file" "$LINENO" 5
test -z "$ac datarootdir hack$ac datarootdir seen" &&
  { ac out=`sed -n '/\${datarootdir}/p' "$ac tmp/out"`; test -n "$ac out"; } &&
  { ac out=`sed -n '/^[ ]*datarootdir[
      "$ac tmp/out"`; test -z "$ac out"; } &&
  { $as echo "$as me:${as lineno-$LINENO}: WARNING: $ac file contains a reference
to the variable \`datarootdir'
```

```
which seems to be undefined. Please make sure it is defined" >&5
$as echo "$as me: WARNING: $ac file contains a reference to the variable
\`datarootdir'
which seems to be undefined. Please make sure it is defined" >&2;}
 rm -f "$ac tmp/stdin"
 case $ac file in
 -) cat "$ac tmp/out" && rm -f "$ac tmp/out";;
  *) rm -f "$ac_file" && mv "$ac_tmp/out" "$ac_file";;
 || as fn error $? "could not create $ac file" "$LINENO" 5
 ;;
  :H)
  # CONFIG HEADER
  if test x"$ac file" != x-; then
      $as echo "/* $configure input */" \
      && eval '$AWK -f "$ac_tmp/defines.awk"' "$ac_file_inputs"
    } >"$ac tmp/config.h" \
      || as fn error $? "could not create $ac file" "$LINENO" 5
    if diff "$ac file" "$ac tmp/config.h" >/dev/null 2>&1; then
      { $as echo "$as me:${as lineno-$LINENO}: $ac file is unchanged" >&5
$as echo "$as me: $ac file is unchanged" >&6;}
    else
     rm -f "$ac file"
     mv "$ac tmp/config.h" "$ac file" \
      || as fn error $? "could not create $ac file" "$LINENO" 5
    fi
  else
    $as echo "/* $configure input */" \
      && eval '$AWK -f "$ac tmp/defines.awk"' "$ac file inputs" \
      || as fn error $? "could not create -" "$LINENO" 5
  fi
 ;;
  esac
done # for ac tag
```

Окончание листинга 6

```
as fn exit 0
ACEOF
ac clean files=$ac clean files save
test $ac write fail = 0 ||
  as fn error $? "write failure creating $CONFIG STATUS" "$LINENO" 5
# configure is writing to config.log, and then calls config.status.
# config.status does its own redirection, appending to config.log.
# Unfortunately, on DOS this fails, as config.log is still kept open
# by configure, so config.status won't be able to write to it; its
# output is simply discarded. So we exec the FD to /dev/null,
# effectively closing config.log, so it can be properly (re)opened and
# appended to by config.status. When coming back to configure, we
# need to make the FD available again.
if test "$no create" != yes; then
  ac_cs_success=:
 ac config status args=
  test "$silent" = yes &&
    ac config status args="$ac config status args --quiet"
  exec 5>/dev/null
  $SHELL $CONFIG STATUS $ac config status args || ac cs success=false
  exec 5>>config.log
  # Use ||, not &&, to avoid exiting from the if with \$? = 1, which
  # would make configure fail if this is the last instruction.
  ac\ cs\ success\ ||\ as\ fn\ exit\ 1
fi
if test -n "$ac unrecognized opts" && test "$enable option checking" != no; then
  { $as echo "$as me:${as lineno-$LINENO}: WARNING: unrecognized options:
$ac unrecognized opts" >&5
$as echo "$as me: WARNING: unrecognized options: $ac unrecognized opts" >&2;}
fiCC = qcc
CFLAGS = -std=gnu99
SOURCES = main.c Input.c FileIO.c
all:
      $(CC) $(CFLAGS) $(SOURCES) -o start.o
```

5 Тестовые примеры работы программ

Далее на рисунках приведены тестовые примеры работы программы.

```
File Edit View Bookmarks Settings Help

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ ./Lab5_Client 1
92.168.0.105 2230 16 ABC
durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ 

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$
```

Рисунок 1 – Запуск клиента

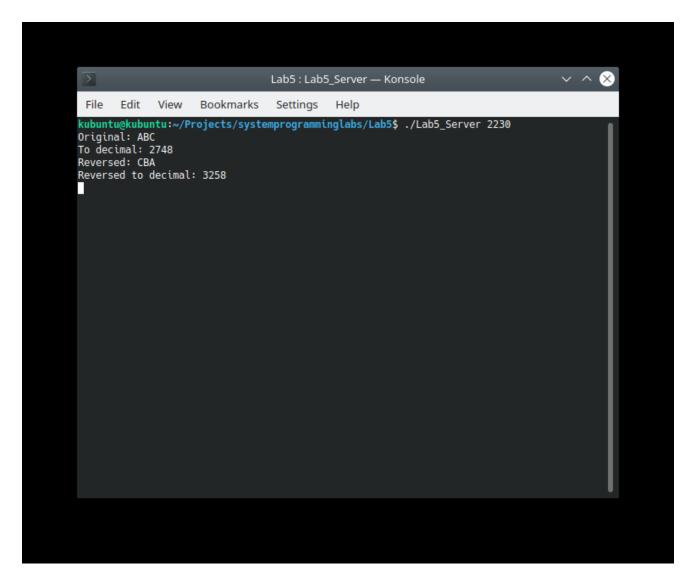


Рисунок 2 – Реакция сервера

```
File Edit View Bookmarks Settings Help

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ ./Lab5_Client 1
92.168.0.105 2231 16 ABC
durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$
```

Рисунок 3 – Запуск клиента с неверным портом

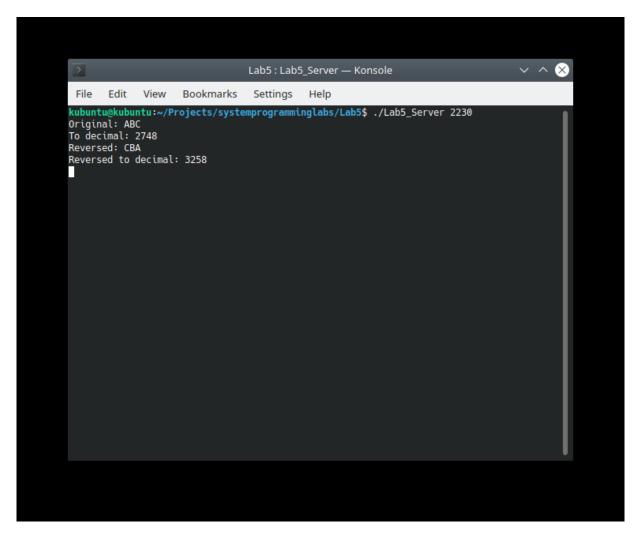


Рисунок 4 – Реакция сервера (отсутствует)

```
file Edit View Bookmarks Settings Help

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ ./Lab5_Client 1

92.168.0.105 2231 10 ABC

Wrong number format!

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ ./Lab5_Client 1

92.168.0.105 2231 24 10

Wrong radix format!

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ ./Lab5_Client 1

92.168.0.105 2231 -4 10

Wrong radix format!

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ ./Lab5_Client 1

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5/cmake-build-debug$ ./Lab5_Client 1
```

Рисунок 5 – Попытки запуска клиента с неверными параметрами

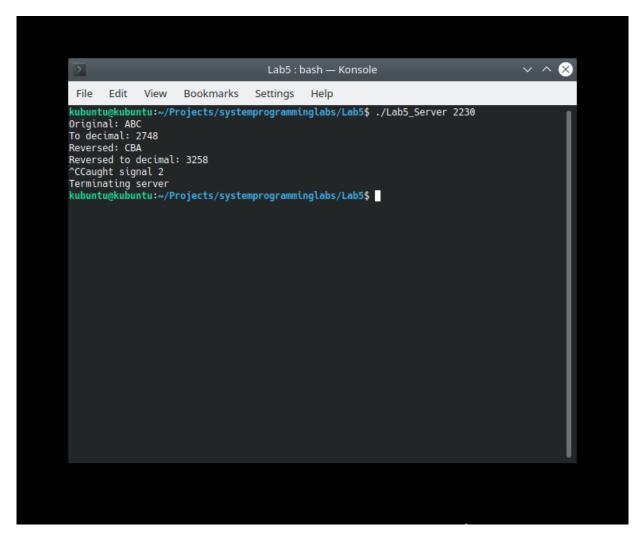


Рисунок 6 – Реакция сервера на ввод Ctrl + C

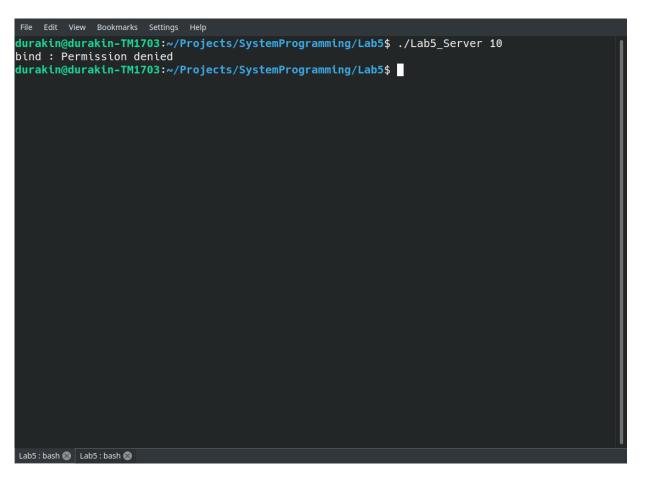


Рисунок 7 – Попытка запуска сервера с указанием "плохого" порта

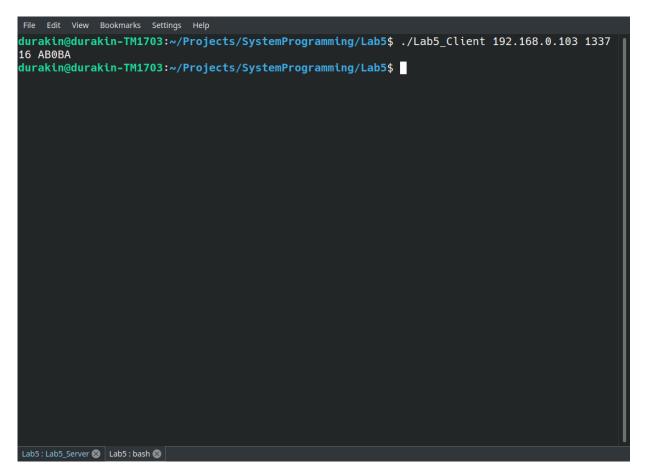


Рисунок 8 – Запуск клиента

```
File Edit View Bookmarks Settings Help

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5$ ./Lab5_Server 10

bind : Permitssion denied

durakin@durakin=TM1703:~/Projects/SystemProgramming/Lab5$ ./Lab5_Server 1337

Original: AB0BA

To decimal: 700602

Reversed: AB0BA

Reversed to decimal: 700602
```

Рисунок 9 – Реакция сервера

```
File Edit View Bookmarks Settings Help

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5$ ./Lab5_Client 128.0.0.1 2020 2 11

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5$ 

Lab5:Lab5_Server 

Lab5:Lab5_
```

Рисунок 9 – Запуск клиента с передачей неверного ІР-адреса сервера

```
File Edit View Bookmarks Settings Help

durakin@durakin-TM1703:~/Projects/SystemProgramming/Lab5$ ./Lab5_Server 2020

Lab5:Lab5_Server 
Lab5_Server 
Lab5_Serv
```

Рисунок 10 – Реакция сервера (отсутствует