

PROGRAM 17: WRITE A C PROGRAM TO THAT OUTPUT THE CONTENTS OF ITS ENVIRONMENT LIST.

bmsce@bmsce-Precision-T1700:~\$ nano prog17.c

```
#include<stdio.h>

int main(int argc,char * argv[])
{
    int i;
    char **ptr;
    extern char **environ;
    for(ptr=environ;*ptr!=0;ptr++)
        printf("%s\n",*ptr);
    return 0;
}
```

OUTPUT:

bmsce@bmsce-Precision-T1700:~\$ gcc prog17.c -o prog17

bmsce@bmsce-Precision-T1700:~\$./prog17

SHELL=/bin/bash

SESSION_MANAGER=local/bmsce-Precision-T1700:@/tmp/.ICE-unix/2282,unix/bmsce-Precision-T1700:/tmp/.ICE-unix/2282

QT_ACCESSIBILITY=1

COLORTERM=truecolor

XDG_CONFIG_DIRS=/etc/xdg/xdg-ubuntu:/etc/xdg

XDG_MENU_PREFIX=gnome-

GNOME_DESKTOP_SESSION_ID=this-is-deprecated

GTK_IM_MODULE=ibus

LANGUAGE=en_IN:en

QT4_IM_MODULE=xim

GNOME_SHELL_SESSION_MODE=ubuntu

SSH_AUTH_SOCK=/run/user/1000/keyring/ssh

XMODIFIERS=@im=ibus

DESKTOP_SESSION=ubuntu

SSH_AGENT_PID=2384

GTK_MODULES=gail:atk-bridge

XDG_SEAT=seat0

PWD=/home/bmsce

LOGNAME=bmsce

XDG_SESSION_DESKTOP=ubuntu

XDG_SESSION_TYPE=x11

PIG_HOME=/usr/local/pig

GPG_AGENT_INFO=/run/user/1000/gnupg/S.gpg-agent:0:1

XAUTHORITY=/run/user/1000/gdm/Xauthority
GJS_DEBUG_TOPICS=JS ERROR;JS LOG
WINDOWPATH=2
HOME=/home/bmsce
USERNAME=bmsce
IM_CONFIG_PHASE=2
LANG=en_IN

LS_COLORS=rs=0:di=01;34:ln=01;36:mh=00:pi=40;33:so=01;35:do=01;35:bd=40;33;01:cd=40;33;01:or=40;31;01:mi=00:su=37;41:sg=30;43:ca=30;41:tw=30;42:ow=34;42:st=37;44:ex=01;32:*.tar=01;31:*.tgz=01;31:*.arc=01;31:*.arj=01;31:*.taz=01;31:*.lha=01;31:*.lz4=01;31:*.lzh=01;31:*.lzma=01;31:*.tlz=01;31:*.txz=01;31:*.tzo=01;31:*.t7z=01;31:*.zip=01;31:*.z=01;31:*.dz=01;31:*.gz=01;31:*.lrz=01;31:*.lz=01;31:*.lzo=01;31:*.xz=01;31:*.zst=01;31:*.tzst=01;31:*.bz2=01;31:*.bz=01;31:*.tbz=01;31:*.tbz2=01;31:*.tz=01;31:*.deb=01;31:*.rpm=01;31:*.jar=01;31:*.war=01;31:*.ear=01;31:*.sar=01;31:*.rar=01;31:*.alz=01;31:*.ace=01;31:*.zoo=01;31:*.cpio=01;31:*.7z=01;31:*.rz=01;31:*.cab=01;31:*.wim=01;31:*.swm=01;31:*.dwm=01;31:*.esd=01;31:*.jpg=01;35:*.jpeg=01;35:*.mjpg=01;35:*.mjpeg=01;35:*.gif=01;35:*.bmp=01;35:*.pbm=01;35:*.pgm=01;35:*.ppm=01;35:*.tga=01;35:*.xbm=01;35:*.xpm=01;35:*.tif=01;35:*.tiff=01;35:*.png=01;35:*.svg=01;35:*.svgz=01;35:*.mng=01;35:*.pcx=01;35:*.mov=01;35:*.mpg=01;35:*.mpeg=01;35:*.m2v=01;35:*.mkv=01;35:*.webm=01;35:*.ogm=01;35:*.mp4=01;35:*.m4v=01;35:*.mp4v=01;35:*.vob=01;35:*.qt=01;35:*.nuv=01;35:*.wmv=01;35:*.asf=01;35:*.rm=01;35:*.rmvb=01;35:*.flc=01;35:*.avi=01;35:*.fli=01;35:*.flv=01;35:*.gl=01;35:*.dl=01;35:*.xcf=01;35:*.xwd=01;35:*.yuv=01;35:*.cgm=01;35:*.emf=01;35:*.ogv=01;35:*.ogx=01;35:*.aac=00;36:*.au=00;36:*.flac=00;36:*.m4a=00;36:*.mid=00;36:*.midi=00;36:*.mka=00;36:*.mp3=00;36:*.mpc=00;36:*.ogg=00;36:*.ra=00;36:*.wav=00;36:*.oga=00;36:*.opus=00;36:*.spx=00;36:*.xspf=00;36:

XDG_CURRENT_DESKTOP=ubuntu:GNOME
VTE_VERSION=5602

GNOME_TERMINAL_SCREEN=/org/gnome/Terminal/screen/43a8c7c1_423e_4dc9_bbbb_82e26608a53b
CLUTTER_IM_MODULE=xim
GJS_DEBUG_OUTPUT=stderr
PYSARK_PYTHON=/usr/bin/python3
QT_DEVICE_PIXEL_RATIO=auto
LESSCLOSE=/usr/bin/lesspipe %s %s
XDG_SESSION_CLASS=user
TERM=xterm-256color
LESSOPEN=| /usr/bin/lesspipe %s
USER=bmsce
GNOME_TERMINAL_SERVICE=:1.78
DISPLAY=:0
SHLVL=1
SPARK_HOME=/opt/spark
PT7HOME=/opt/pt

QT_IM_MODULE=ibus
XDG_VTNR=2
XDG_SESSION_ID=2

LD_LIBRARY_PATH=./home/bmsce/ns-allinone-2.35/otcl-1.14/home/mca89/ns-allinone-2.35/lib:
/opt/pt/lib
XDG_RUNTIME_DIR=/run/user/1000

TCL_LIBRARY=./home/bmsce/ns-allinone-2.35/tcl8.5.10/library:/home/bmsce/ns-allinone-2.35/t
cl8.5.10/library

XDG_DATA_DIRS=/usr/share/ubuntu:/usr/local/share:/usr/share:/var/lib/snapd/desktop

PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap
/bin:/usr/local/pig/bin:/home/bmsce/ns-allinone-2.35/bin:/home/bmsce/ns-allinone-2.35/tcl8.5.10/
unix:/home/mca89/ns-allinone-2.35/tk8.5.10/unix:/home/bmsce/softwares/XGraph4.38_linux64/
bin:/opt/pt/bin:/opt/spark/bin:/opt/spark/sbin:/home/bmsce/ns-allinone-2.35/bin:/home/bmsce/ns-
allinone-2.35/tcl8.5.10/unix:/home/mca89/ns-allinone-2.35/tk8.5.10/unix:/home/bmsce/softwares
/XGraph4.38_linux64/bin:/opt/pt/bin:/opt/spark/bin:/opt/spark/sbin
GDMSESSION=ubuntu
DBUS_SESSION_BUS_ADDRESS=unix:path=/run/user/1000/bus
_=./progm17

Program 18: Write a c POSIX compliant program that prints the posix defined. Configuration options supported on any given system using features test macros

```
bmsce@bmsce-Precision-T1700:~$ nano prog18.c
#define _POSIX_SOURCE
#define _POSIX_C_SOURCE 199309L
#include<stdio.h>
#include<unistd.h>
int main()
{
#ifdef _POSIX_JOB_CONTROL
printf("System supports job control\n");
#else
printf("System does not support job control\n");
#endif
#ifdef _POSIX_SAVED_IDS
printf("System supports saved set-UID and saved set-GID\n");
#else
printf("System does not support saved set-UID and saved set-GID\n");
#endif
#ifdef _POSIX_CHOWN_RESTRICTED
printf("Chown_restricted option is : %d\n",_POSIX_CHOWN_RESTRICTED);
#else
printf("System does not support chown_restricted option\n");
#endif
#ifdef _POSIX_NO_TRUNC
printf("Pathname trunc option is : %d\n",_POSIX_NO_TRUNC);
#else
printf("System does not support system-wide pathname trunc option\n");
#endif
#ifdef _POSIX_VDISABLE
printf("Disable character for terminal files is %d\n",_POSIX_VDISABLE);
#else
printf("System does not support _POSIX_VDISABLE\n");
#endif
}
```

OUTPUT:

```
bmsce@bmsce-Precision-T1700:~$ gcc prog18.c -o prog18
```

```
bmsce@bmsce-Precision-T1700:~$ ./prog18
```

```
System supports job control
System supports saved set-UID and saved set-GID
Chown_restricted option is : 0
Pathname trunc option is : 1
Disable character for terminal files is 0
```