Output of the Program: (Program.cpp)

Tue Dec 31 20:00:00 IST 2029

sh: 1: doaate: not found

student pts/0 2024-12-31 19:45

Experiment No. 23 Date : 31/12/2024

Program - 23

23. Write a program to implement UNIX system(), using APIs.

Program :- (Pgm23.cpp)

```
#include <stdio.h>
#include <sys/wait.h>
#include <errno.h>
#include <unistd.h>
#include <stdlib.h>
#include <iostream>
using namespace std;
int system(const char *cmd)
 {
  pid_t pid;

  if (cmd == NULL)
    return (1); /* always a command processor
with Unix */

  if ((pid = fork()) < 0) {
  status = -1;  /*probably out of processes */
  }
else if (pid == 0) {
   execl("/bin/sh", "sh", "-c", cmd, (char *) 0);
   _exit(127);      /*execl error */
else {
   while (waitpid(pid, &status, 0) < 0)
```

Experiment No. : 23 Date : 31/10/2029

```
if (errno != EINTR)
{
  status = -1 /* error other than EINTR from
waitpid() */
  break;
}
}
return (status);
}

int main (void)
{
   if ((status = system("date; exit 0")) < 0)
     perror("system error");

   if ((status = system("daaate")) < 0)
     perror("system error");

   if ((status = system("who; exit 44")) < 0)
     perror("system error");

   exit(0);
}
```