

5 a) Program:

```
#include <stdio.h>
#include <unistd.h>
#include <fcntl.h>
#include <sys/stat.h>
#include <sys/types.h>
int main (int argc, char *argv[])
{
    struct stat statv;
    int i;
    for (i=0; i<argc; i++)
    {
        if (lstat (argv[i], &statv) == 1)
        {
            printf ("%s is invalid file\n", argv[i]);
            continue;
        }
        if (S_ISDIR (statv.st_mode))
            printf ("%s is a directory file\n", argv[i]);
        else if (S_ISREG (statv.st_mode))
            printf ("%s is a regular file\n", argv[i]);
    }
}
```

UNIX - Writep

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IBM UES046

UNIX LAB-Test-2

```
else if (S_ISBLK (statv.st_mode))
    printf ("%s is a block device file\n", argv[i]);
else if (S_ISCHR (statv.st_mode))
    printf ("%s is a character device file\n", argv[i]);
else if (S_ISFIFO (statv.st_mode))
    printf ("%s is a fifo file\n", argv[i]);
else if (S_ISLNK (statv.st_mode))
    printf ("%s is a symbolic link\n", argv[i]);
}
return 0;
}
```

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Kharithik

5 b) Program:

```
#include <stdio.h>
#include <sys/wait.h>
#include <unistd.h>

int main()
{
    int wstatus;
    if (fork() == 0)
    {
        printf("In the child process\n");
        printf("Files in the current directory are: \n");
        char* args[] = {"-la", NULL};
        execv("/bin/ls", args);
    }
    else
    {
        printf("In the parent process\n");
        wait(&wstatus);
        printf("Back in the parent process!\n");
        printf("Child exited with exit status %d\n", WEXITSTATUS(wstatus));
    }
    return 0;
}
```