

ROLL NO:422129

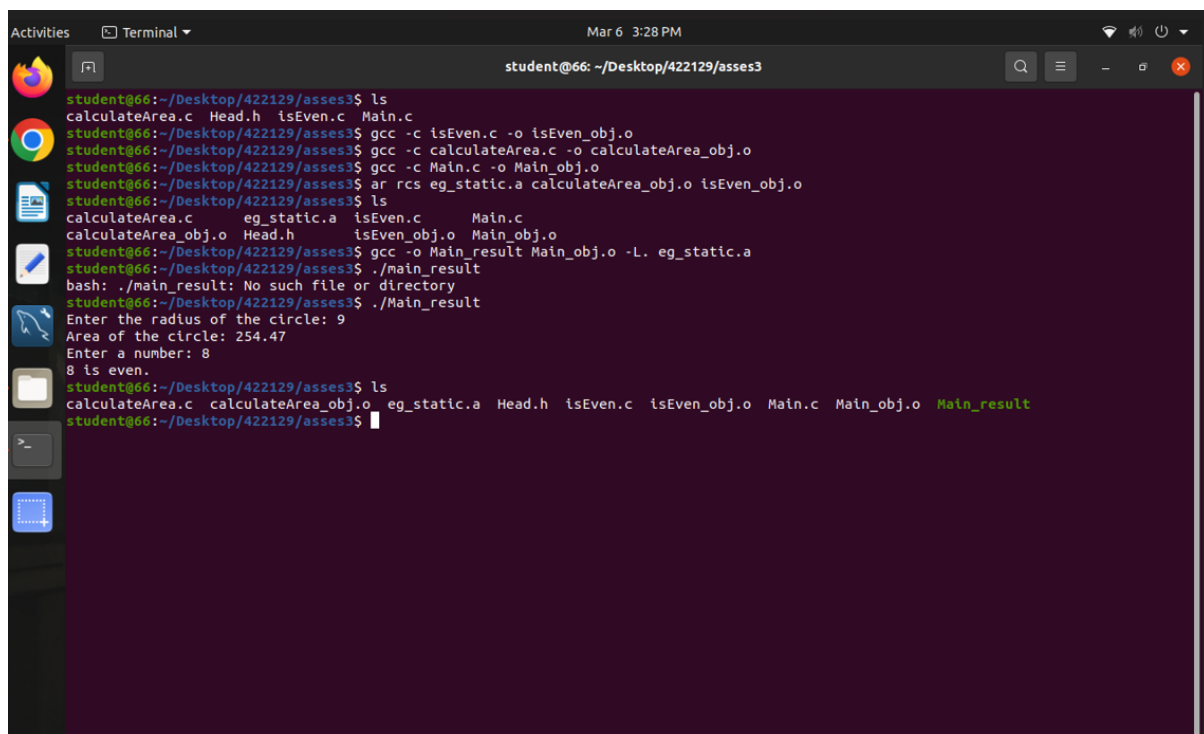
C.PURUSHOTHAM

SECTION:A

Static linking:

ROLLNO:422166

K.MOHAN SAI



```
student@66: ~/Desktop/422129/asses3
student@66:~/Desktop/422129/asses3$ ls
calculateArea.c  Head.h  isEven.c  Main.c
student@66:~/Desktop/422129/asses3$ gcc -c isEven.c -o isEven_obj.o
student@66:~/Desktop/422129/asses3$ gcc -c calculateArea.c -o calculateArea_obj.o
student@66:~/Desktop/422129/asses3$ gcc -c Main.c -o Main_obj.o
student@66:~/Desktop/422129/asses3$ ar rcs eg_static.a calculateArea_obj.o isEven_obj.o
student@66:~/Desktop/422129/asses3$ ls
calculateArea.c  eg_static.a  isEven.c  Main.c
calculateArea_obj.o  Head.h  isEven_obj.o  Main_obj.o
student@66:~/Desktop/422129/asses3$ gcc -o Main_result Main_obj.o -L. eg_static.a
student@66:~/Desktop/422129/asses3$ ./Main_result
bash: ./Main_result: No such file or directory
student@66:~/Desktop/422129/asses3$ ./Main_result
Enter the radius of the circle: 9
Area of the circle: 254.47
Enter a number: 8
8 is even.
student@66:~/Desktop/422129/asses3$ ls
calculateArea.c  calculateArea_obj.o  eg_static.a  Head.h  isEven.c  isEven_obj.o  Main.c  Main_obj.o  Main_result
student@66:~/Desktop/422129/asses3$
```

## Dynamic Linking:

```
Activities Terminal Mar 6 3:39 PM student@66: ~/Desktop/422129/asses3

student@66:~/Desktop/422129/asses3$ ls
calculateArea.c  eg_static.a  isEven.c  Main.c  Main_result
calculateArea_obj.o  Head.h  isEven_obj.o  Main_obj.o
student@66:~/Desktop/422129/asses3$ gcc *.o -shared -o eg_dynamic.so
student@66:~/Desktop/422129/asses3$ ls
calculateArea.c  eg_dynamic.so  Head.h  isEven_obj.o  Main_obj.o
calculateArea_obj.o  eg_static.a  isEven.c  Main.c  Main_result
student@66:~/Desktop/422129/asses3$ gcc -o Main_result Main_obj.o -L. eg_dynamic.so
student@66:~/Desktop/422129/asses3$ ./Main_result
./Main_result: error while loading shared libraries: eg_dynamic.so: cannot open shared object file: No such file or directory
student@66:~/Desktop/422129/asses3$ sudo cp eg_dynamic.so /usr/lib
[sudo] password for student:
student@66:~/Desktop/422129/asses3$ ./Main_result
Enter the radius of the circle: 7
Area of the circle: 153.94
Enter a number: 8
8 is even.
student@66:~/Desktop/422129/asses3$ sudo rm /usr/lib/eg_dynamic.so
student@66:~/Desktop/422129/asses3$ pwd
/home/student/Desktop/422129/asses3
student@66:~/Desktop/422129/asses3$ export LD_LIBRARY_PATH=/home/student/Desktop/UNIX
student@66:~/Desktop/422129/asses3$ ./Main_result
Enter the radius of the circle: 9
Area of the circle: 254.47
Enter a number: 3
3 is odd.
student@66:~/Desktop/422129/asses3$ ls
calculateArea.c  calculateArea_obj.o  eg_dynamic.so  eg_static.a  Head.h  isEven.c  isEven_obj.o  Main.c  Main_obj.o  Main_result
student@66:~/Desktop/422129/asses3$ ldd Main_result
linux-vdso.so.1 (0x00007fff847f4000)
eg_dynamic.so (0x00007fb91f7f2000)
libc.so.6 => /lib/x86_64-linux-gnu/libc.so.6 (0x00007fb91f5ed000)
/lib64/ld-linux-x86-64.so.2 (0x00007fb91f7fe000)
student@66:~/Desktop/422129/asses3$
```