## 6)Write an ALP to check whether a number is odd or even

## Program –

```
section .data
   msg1 db "  Enter the number:   ", 0
   odd db "Number is odd ", 0xa
   even db "Number is even ", 0xa
    nl db 10
%macro print 2
   mov eax, 4
   mov ebx, 1
   mov ecx, %1
   mov edx, %2
   int 0x80
%endmacro
%macro input 2
   mov eax, 3
   mov ebx, 2
   mov ecx, %1
   mov edx, %2
   int 0x80
%endmacro
%macro exit 0
   mov eax, 1
   mov ebx, 0
   int 0x80
%endmacro
section .bss
   num1 resb 2
   num2 resb 2
section .text
   global _start
_start:
   print msg1, 19
   input num1, 2
   mov al, [num1]
   sub al, '0'
    mov bl, 2
   div bl
   cmp ah, 1
   je odd_nums
   jne even_num
odd_nums:
   print odd, 25
   jmp exit_prog
even_num:
   print even, 30
   jmp exit_prog
 mov eax,4
 mov ebx,1
 mov ecx,nl
 mov edx,1
int 0x80

exit_prog:
   exit
```

**OUTPUT**


**Conclusion – CMP and JMP statements were successfully implemented using nasm and ubuntu**