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POA EXPERIMENT 10

POA

Experiment 10: Interrupts

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Aim: Implement assembly program to demonstrate few DOS interrupts.

Theory: 1. In 8086 microprocessor, interrupts are event that cause normal sequence of program execution to be temporarily halted so that specific set of instructions (Instruction Service Routine) can be executed. The 'INT' instruction is used to generate interrupts.

2. Few Common interrupts in 8086:

- INT 21H: DOS function call. It is a software interrupt to invoke various DOS services.
- INT 10H: Video services. It is used for video related services such as displaying characters on screen.
- INT 16H: Keyboard services, used for keyboard related services, like reading a character from keyboard.
- INT 4CH: Program termination, used to terminate a program & return control to OS.

- The Interrupt vector table in 8086 contains addresses pointing to ISR.
- When interrupt occurs, processor looks up corresponding address in IVT & jumps to associated routine.
- The routine is responsible for handling specific interrupt & returning control to main program.

Conclusion : Hence, we have implemented various
DOS interrupts on 8086 processor &
understood how interrupt works in 8086.

Code :

```
org 100h
```

```
DATA SEGMENT
```

```
MSG DB "Enter any Character : $"
```

```
DATA ENDS
```

```
CODE SEGMENT
```

```
START:
```

```
MOV AX,DATA
```

```
MOV DS,AX
```

```
LEA DX,MSG
```

```
MOV AH,09H
```

```
INT 21H
```

```
MOV AH,01
```

```
INT 21H
```

```
MOV DL,AL
```

```
MOV AH,02
```

```
INT 21H
```

```
MOV AH,4CH
```

```
INT 21H
```

```
CODE ENDS
```

```
END START
```

```
ret
```

Output:





