

ASSIGNMENT NO 4

PROBLEM STATEMENT:

Write a switch case driven X86/64 ALP to perform 64-bit hexadecimal arithmetic operations (+, -, *, /) using suitable macros. Define procedure for each operation.

SOURCE CODE:

```
section .data
```

```
    menumsg db 10,'***** Menu *****',
```

```
    db 10,'1: Addition'
```

```
    db 10,'2: Subtraction'
```

```
    db 10,'3: Multiplication'
```

```
    db 10,'4: Division'
```

```
    db 10,10,'Enter your choice:: '
```

```
    menumsg_len: equ $-menu
```

```
    addmsg db 10,'Welcome to additon',10
```

```
    addmsg_len equ $-addmsg
```

```
    submsg db 10,'Welcome to subtraction',10
```

```
    submsg_len equ $-submsg
```

```
    mulmsg db 10,'Welcome to Multiplication',10
```

```
    mulmsg_len equ $-mulmsg
```

divmsg db 10,'Welcome to Division',10

divmsg_len equ \$-divmsg

wrchmsg db 10,10,'You Entered a Wrong Choice....!',10

wrchmsg_len equ \$-wrchmsg

no1 dq 08h

no2 dq 02h

nummsg db 10

result dq 0

resmsg db 10,'Result is:'

resmsg_len equ \$-resmsg

qmsg db 10,'Quotient::'

qmsg_len equ \$-qmsg

rmsg db 10,'Remainder::'

rmsg_len equ \$-rmsg

nwmsg db 10

resh dq 0

resl dq 0

section .bss

choice resb 2