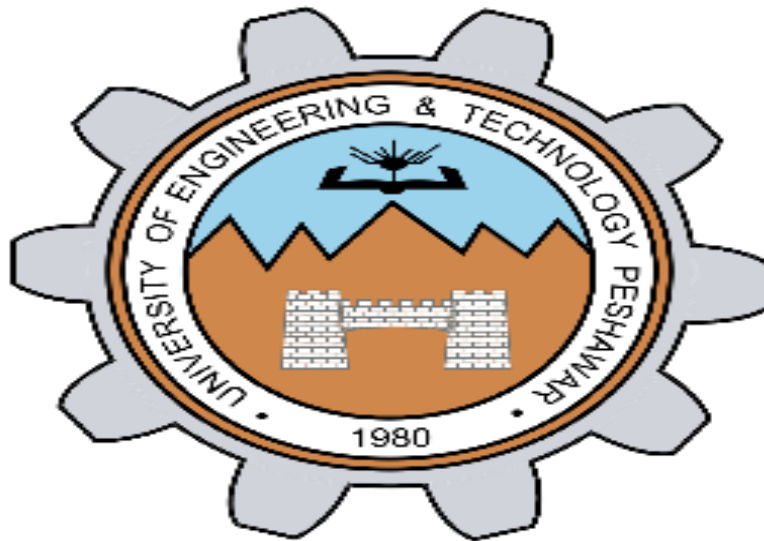# University of Engineering & Technology, Peshawar

DEPARTMENT OF COMPUTER SYSTEM ENGINEERING

Fall 2021

LAB 05

(CSE-304L)

Computer Organization and Architecture Lab

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Reg NO: 19PWCSE1770

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Task1 : Take an alphabet in small letter using his ascii display the capital of that Alphabet

```
.data

str: .asciiz"Anis Ahmad: \n 19PWCSE1770:\n "

str1: .asciiz"\nEnter small letter: "

str2: .asciiz"\nThis is the respective capital letter: "

.text

main:

li $v0,4

la $a0,str1

syscall


li $v0,12

syscall

move $t0,$v0


sub $t1, $t0,32

li $v0,4

la $a0,str2

syscall


move $a0,$t1

li $v0,11

syscall


li $v0,10

syscall
```

Output:

Enter small letter: a
This is the respective capital letter: A
Enter small letter: b
This is the respective capital letter: B
Enter small letter: c
This is the respective capital letter: C
Enter small letter: d
This is the respective capital letter: D
Enter small letter: e
This is the respective capital letter: E
Enter small letter: f
This is the respective capital letter: F
Enter small letter: |

Task2 : Addition Subtraction Multipication,Division

```
.data

str: .asciiz"Anis Ahmad: \n 19PWCSE1770:\n "

str1: .asciiz"\nEnter small letter: "

str2: .asciiz"\nThis is the respective capital
letter: "

.text

main:


li $v0,4

la $a0,str1

syscall


li $v0,12

syscall

move $t0,$v0


sub $t1, $t0,32


li $v0,4

la $a0,str2

syscall


move $a0,$t1

li $v0,11

syscall
```

```
li $v0,10

syscall




.data

str: .asciiz"Anis Ahmad: \n 19PWCSE1770:\n For
Operation Enter  +  -  /  * "

str1: .asciiz"Enter first number: "

str2: .asciiz"Enter 2nd number: "

str3: .asciiz"Enter Operation : "

str4: .asciiz"Invalid Operation  "

str5: .asciiz"Result : "

str6: .asciiz"\nReminder : "

num1: .word 43

num2: .word 45

num3: .word 47

num4: .word 42

.text

main:

lw $t5,num1

lw $t6,num2

lw $t7,num3

lw $t8,num4


li $v0,4

la $a0,str

syscall
```

```
li $v0,4

la $a0,str1

syscall


li $v0,5

syscall

move $t0,$v0


li $v0,4

la $a0,str2

syscall

li $v0,5

syscall

move $t1,$v0


li $v0,4

la $a0,str3

syscall

li $v0,12

syscall

move $t4,$v0


beq $t4,$t5 addition

beq $t4,$t6 subtraction

beq $t4,$t7 division

beq $t4,$t8 multipication
```

```
li $v0, 4

la $a0,str4

syscall

b khan


addition:

add $t2,$t0,$t1

li $v0, 4

la $a0,str5

syscall

li $v0,1

move $a0,$t2

syscall

b khan


subtraction:

sub $t2,$t0,$t1

li $v0, 4

la $a0,str5

syscall

b khan

li $v0,1

move $a0,$t2

syscall

b khan


division:

div $t2,$t0,$t1

li $v0, 4
```

```
la $a0,str5

syscall

li $v0,1

move $a0,$t2

syscall

li $v0, 4

la $a0,str6

syscall

li $v0,1

mfhi $a0

syscall

b khan


multipication:

mul $t2,$t0,$t1

li $v0, 4

la $a0,str5

syscall

li $v0,1

move $a0,$t2

syscall

b khan



khan:

li $v0,10

syscall
```

OUTPUT:

```
Console
```

```
Anis Ahmad:
 19PWCSE1770:

Enter first number: 5
Enter 2nd number: 4
Enter Operation : +
Result : 9
Enter first number: 6
Enter 2nd number: 7
Enter Operation : *
Result : 42
Enter first number: 61
Enter 2nd number: 6
Enter Operation : /
Result : 10
Reminder : 1
Enter first number: 4
Enter 2nd number: 5
Enter Operation : %
Invalid Operation
Enter first number: |
```