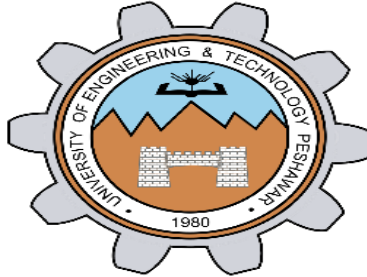


Lab report no 7



Fall 2021

Computer Architecture and organization Lab

Submitted By

Names

Registration No

Muhammad Ali

19pwcse1801

Section: A

Date: 19,2,21

Submitted to:

Dr Amaad khalil

Department of Computer Systems Engineering
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Task no 1: -

Code: -

.data

msg1: .asciiz "Muhammad Ali 19pwcse1801 \nenter temp in farenheight "

msg2: .asciiz "\ntemp in celsius is"

f: .float 32.0

f1: .float 0.555

.text

lwc1 \$f2, f

lwc1 \$f5, f1

li \$v0, 4

la \$a0, msg1

syscall

li \$v0, 6

syscall

mov.s \$f1,\$f0

sub.s \$f3,\$f1, \$f2

mul.s \$f4,\$f3, \$f5

li \$v0, 4

la \$a0, msg2

syscall

mov.s \$f12, \$f4

li \$v0 ,2

syscall

li \$v0, 10

syscall

Register: -

Registers	Coproc 1	Coproc 0
Name	Float	Double
\$f0	0xc1600000	0xc1600000c1600000
\$f1	0xc1600000	
\$f2	0x42000000	0xc238000004200000
\$f3	0xc2380000	
\$f4	0xc1cc3d71	0x3f0e147bc1cc3d71
\$f5	0x3f0e147b	
\$f6	0x00000000	0x0000000000000000
\$f7	0x00000000	
\$f8	0x00000000	0x0000000000000000
\$f9	0x00000000	
\$f10	0x00000000	0x0000000000000000
\$f11	0x00000000	
\$f12	0xc1cc3d71	0x000000000c1cc3d71
\$f13	0x00000000	
\$f14	0x00000000	0x0000000000000000
\$f15	0x00000000	
\$f16	0x00000000	0x0000000000000000
\$f17	0x00000000	
\$f18	0x00000000	0x0000000000000000
\$f19	0x00000000	
\$f20	0x00000000	0x0000000000000000
\$f21	0x00000000	
\$f22	0x00000000	0x0000000000000000
\$f23	0x00000000	
\$f24	0x00000000	0x0000000000000000
\$f25	0x00000000	
\$f26	0x00000000	0x0000000000000000
\$f27	0x00000000	
\$f28	0x00000000	0x0000000000000000

Consul: -

Mars Messages	Run I/O
	Muhammad Ali 19pwcse1801
Clear	enter temp in farenheight -14
	temp in celsius is-25.53
	-- program is finished running --

Task no 2: -

Code: -

.data

msg1: .ascii " Muhammad Ali 19pwcse1801 quardral GPA calculation\n"

gpa1: .ascii " enter first subject GPA "

ch1: .ascii " \nenter credit of first subject "

gpa2: .ascii " \nenter second subject GPA "

ch2: .ascii " \nenter credit of second subject "

gpa3: .ascii " \nenter third subject GPA "

ch3: .ascii " \nenter credit of third subject "

gpa4: .ascii " \nenter fouth subject GPA "

ch4: .ascii " \nenter credit of fourth subject "

result: .ascii " GPA = "

.text

li \$v0, 4

la \$a0, msg1

syscall

li \$v0, 4

la \$a0, gpa1

syscall

li \$v0, 6

syscall

```
mov.s $f1, $f0
```

```
li $v0, 4
```

```
la $a0, ch1
```

```
syscall
```

```
li $v0, 6
```

```
syscall
```

```
mov.s $f2, $f0
```

```
li $v0, 4
```

```
la $a0, gpa2
```

```
syscall
```

```
li $v0, 6
```

```
syscall
```

```
mov.s $f3, $f0
```

```
li $v0, 4
```

```
la $a0, ch2
```

```
syscall
```

```
li $v0, 6
```

```
syscall
```

```
mov.s $f4, $f0
```

```
add.s $f9,$f3,$f1
```

```
add.s $f10, $f4,$f2
```

li \$v0, 4

la \$a0, gpa3

syscall

li \$v0, 6

syscall

mov.s \$f5, \$f0

li \$v0, 4

la \$a0, ch3

syscall

li \$v0, 6

syscall

mov.s \$f6, \$f0

add.s \$f9,\$f9,\$f5

add.s \$f10, \$f4,\$f6

li \$v0, 4

la \$a0, gpa4

syscall

li \$v0, 6

syscall

mov.s \$f7, \$f0

li \$v0, 4

la \$a0, ch4

syscall

li \$v0, 6

syscall

mov.s \$f8, \$f0

add.s \$f9,\$f9,\$f7

add.s \$f10, \$f4,\$f8

div.s \$f1,\$f9, \$f10

#mflo \$f3

li \$v0, 4

la \$a0, result

syscall

mov.s \$f12, \$f1

li \$v0 ,2

syscall

li \$v0, 10

syscall

Register: -

Registers	Coproc 1	Coproc 0
Name	Float	Double
\$f0	0x40400000	0x3f62222140400000
\$f1	0x3f622221	
\$f2	0x40400000	0x4006666640400000
\$f3	0x40066666	
\$f4	0x40400000	0x3f8cccccd40400000
\$f5	0x3f8cccccd	
\$f6	0x40400000	0x3f800000040400000
\$f7	0x3f800000	
\$f8	0x40400000	0x40a9999940400000
\$f9	0x40a99999	
\$f10	0x40c00000	0x00000000040c00000
\$f11	0x00000000	
\$f12	0x3f622221	0x0000000003f622221
\$f13	0x00000000	
\$f14	0x00000000	0x00000000000000000
\$f15	0x00000000	
\$f16	0x00000000	0x00000000000000000
\$f17	0x00000000	
\$f18	0x00000000	0x00000000000000000
\$f19	0x00000000	
\$f20	0x00000000	0x00000000000000000
\$f21	0x00000000	
\$f22	0x00000000	0x00000000000000000
\$f23	0x00000000	
\$f24	0x00000000	0x00000000000000000
\$f25	0x00000000	
\$f26	0x00000000	0x00000000000000000
\$f27	0x00000000	
\$f28	0x00000000	0x00000000000000000

Consul: -

Mars Messages

Run I/O

Clear

Muhammad Ali 19pwcse1801 quadral GPA calculation
enter first subject GPA 1.1
enter credit of first subject 3

Mars Messages

Run I/O

Clear

enter second subject GPA 2.1
enter credit of second subject 3

Mars Messages

Run I/O

Clear

enter third subject GPA 1.1
enter credit of third subject 3

Mars Messages

Run I/O

Clear

enter fouth subject GPA 1
enter credit of fourth subject 3
GPA = 0.88333327