VauLSMorg
X - XYZZY
Aneka Soal Ujian Sistem Operasi
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1. **True or False?**

   Circle or cross: "**T**" if True – "**F**" if False.

   ```
   $ ls -al
   dr-x--x--x 2 demo demo 4096 Oct 17 17:06 tmp
   ```

   T / F All users can enter directory "`tmp/`".

   T / F $2 + 2 = 3$

2. **Answer these following questions**

   (a) What is your name?

   (b) When is your birthday?

3. **Fill the remaining empty "output" cells**

Script	Output
`echo "1 2 3 4 5" | awk '{print $1 " " $5}'`	
`echo \abc" | tr '[a-z]' '[A-Z]'`	

4. **2016-2**

   Page Table (Waterloo 2012). Consider this following "structure addrspace" of a 32-bit processor.

```
struct addrspace {
   vaddr_t as_vbase1     = 0x00100000; /* text segment:  virtual  base addr */
   paddr_t as_pbase1     = 0x10000000; /* text segment:  physical base addr */
   size_t  as_npages1    = 0x20;       /* text segment:  number   of  pages */
   vaddr_t as_vbase2     = 0x00200000; /* data segment:  virtual  base addr */
   paddr_t as_pbase2     = 0x20000000; /* data segment:  physical base addr */
   size_t  as_npages2    = 0x20;       /* data segment:  number   of  pages */
   vaddr_t as_vbase3     = 0x80000000; /* stack segment: virtual  base addr */
   paddr_t as_pbase3     = 0x80000000; /* stack segment: physical base addr */
};
```

   When possible, translate the provided address.

Possible	Virtual Address	Physical Address	Segment
YES	0x0010 0000	0x1000 0000	text
	0x0010 FEDC		
	0x0011 0000		

5. **2016-2**

   (a) Fill this following with "ASP" (Application Software Provider) or "SaaS" (Software as a Service)

	a separate instance of the application is maintained for each business
	always Up-to-Date for the whole service
	closer to Legacy Software
	lacks scalability for the vendor
	supports multi-tenancy (multiple customers)

(b) There exists four (4) identical processes, with this following CPU utilization table:

	Multiprogramming Combination (%)			
	A	**A + A**	**A + A + A**	**A + A + A + A**
CPU utilization per proses A	10	9.5	9	8.6

The CPU time of each processes is 43 seconds Print the output when the system runs:
How long will be the total time to run concurrently all (4) processes together?!