

COP 3223 Sec 2: Spring'11 C Progr Practice Test 1 (50 points)

- 1. (8 points)

Write down the printed output of this program. Mark your blank chars too.

WRITE YOUR OUTPUT BELOW HERE
ONLY THIS WILL BE GRADED

```
#include <stdio.h>
int main(void)
{
    float f;
    int a,i;
    a = 4;
    a = a - 1;
    printf ("P= %d\n", a);
    a += 2;
    a++;
    a = a % 2;
    printf ("Q= %4d\n", a);
    i=2;
    f=13.0;
    printf ("R= %.2f\n", f/i);
    a=13;
    printf ("S= %d\n", a/i);
    return 0;
}
```

- 4. (10 points) Write a complete C program that uses a FOR-loop to read in 50 integers. For each of the 50 integers, if it is greater than 100, it should be added into a sum that was initialized to zero. After the loop, multiply the sum by 85 and then print out the answer. Assume correct input.

- 2. (12 points) Trace the following program:

ENTER YOUR TRACE BELOW				
Prog	a	b	c	print or other action
1. #include <stdio.h>				
2.				
3. int main(void)				
4. {				
5. int a=5 , b=3, c=4;				
6. a += 1;				
7.				
8. if (b > c)				
9. printf ("a= %d\n", a+4);				
10. else				
11. printf ("b= %d\n", b);				
12.				
13. b -= 2;				
14. if (a <= b)				
15. {				
16. printf ("c= %d\n", a+c);				
17. }				
18. else				
19. {				
20. if (b > c)				
21. printf ("d= %d\n", a+c);				
22. else				
23. printf ("f= %d\n", c);				
24. }				
25.				
26. return 0;				
27. }				
WRITE YOUR FINAL OUTPUT HERE				
Outline 1				
Outline 2				
Outline 3				
Outline 4				

- 3. (20 points) Trace the following program:

ASSUME keyboard input IS: 4

```

1. #include <stdio.h>
2. int main(void)
3. {
4.     int p, i, n;
5.     p = 2; i = 3;
6.     scanf("%d",&n);
7.     while (i <= n)
8.     {
9.         if (i < n)
10.             printf ("b= %d\n", p);
11.             p = p + i * i ;
12.             i++;
13.     }
14.     for (i=6; i<8; i++)
15.     {
16.         printf ("c= %d\n",p+i);
17.     }
18.     return 0;
19. }
```

ENTER YOUR TRACE BELOW

Prog				print or other action
Line #	p	i	n	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				

WRITE YOUR FINAL OUTPUT HERE

Outline 1				
Outline 2				
Outline 3				
Outline 4				
Outline 5				
Outline 6				