

Name : _____

Instructor (circle) Cordes Zhang

CS 100 Exam I

What is the output of the C program shown below when the user enters the input shown at the right?

```
#include <stdio.h>
```

```
int main(void) {
    int a, x, y, z=0;
    for (a=0; a<4; a++) {
        scanf("%d %d", &x, &y);
        if (x < y) {
            z = z - x;
            printf("%d\n", y%x);
        }
        else
            z = z + x;
    }
    printf("%d\n", z);

    return 0;
}
```

| | |
|----|----|
| 2 | 9 |
| 5 | 18 |
| 13 | 4 |
| 27 | 5 |

What is the output of the C program shown below when the user enters the input shown at the right?

```
#include <stdio.h>
#include <string.h>
int main(void) {
    char str[20];
    scanf("%s", str);
    int a = 0;
    int b = strlen(str) - 1;
    int c = 0;
    while (a <= b) {
        if (str[a] == str[b])
            c = c + 1;
        printf("%c + %c\n", str[a], str[b]);
        a = a + 1;
        b = b - 1;
    }
    printf("%d\n", c);
    return 0;
}
```

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| alabama |
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            z = z + x;
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    printf("%d\n", z);

    return 0;
}
```

| | |
|----|----|
| 18 | 4 |
| 3 | 14 |
| 30 | 9 |
| 5 | 19 |

What is the output of the C program shown below when the user enters the input shown at the right?

| |
|--------|
| abxyba |
|--------|

```
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#include <string.h>
int main(void) {
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    int a = 0;
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    int c = 0;
    while (a <= b) {
        if (str[a] == str[b])
            c = c + 1;
        printf("%c + %c\n", str[a], str[b]);
        a = a + 1;
        b = b - 1;
    }
    printf("%d\n", c);
    return 0;
}
```