

ID-CODE: _____

DATE: _____

Instructions:

Answer the questions in the order given.

You are allowed neither to modify the recorded time nor to go back to previous questions.

1. SET CHRONOMETER AT ZERO.

Minutes	Seconds	100ms of a second
0	0	0

>>> START CHRONOMETER <<<

1. Given the C program fragment below

```
x=y+1;  
y=y+1;
```

- (a) what is the final value of x if y is -10. Answer ____
- (b) what is the final value of x if y is 0. Answer ____
- (c) what is the final value of x if y is 10. Answer ____

>>> STOP CHRONOMETER AND WRITE DOWN THE TIME RECORDED <<<

Minutes	Seconds	100ms of a second

2. SET CHRONOMETER AT ZERO.

Minutes	Seconds	100ms of a second
0	0	0

>>> START CHRONOMETER <<<

Given the C program fragment below

```
x=y;  
y=y+1;
```

- (a) what is the final value of x if y is -10. Answer ____
- (b) what is the final value of x if y is 0. Answer ____
- (c) what is the final value of x if y is 10. Answer ____

>>> STOP CHRONOMETER AND WRITE DOWN THE TIME RECORDED <<<

Minutes	Seconds	100ms of a second

3. SET CHRONOMETER AT ZERO.

Minutes	Seconds	100ms of a second
0	0	0

>>> START CHRONOMETER <<<

Given the C program fragment below

```
if ( x==y&&(x+1)==z ) p=1;  
else if (x!=y) {x=x+1; p=2;}
```

- (a) what is the final value of p if x is 10, y is 11, z is 10. Answer ____
- (b) what is the final value of p if x is 10, y is 10, z is 10. Answer ____
- (c) what is the final value of p if x is 10, y is 9, z is 10. Answer ____
- (d) what is the final value of p if x is 10, y is 11, z is 11. Answer ____
- (e) what is the final value of p if x is 10, y is 10, z is 11. Answer ____
- (f) what is the final value of p if x is 10, y is 9, z is 11. Answer ____

>>> STOP CHRONOMETER AND WRITE DOWN THE TIME RECORDED <<<

Minutes	Seconds	100ms of a second

4. SET CHRONOMETER AT ZERO.

Minutes	Seconds	100ms of a second
0	0	0

>>> START CHRONOMETER <<<

Given the C program fragment below

```
if(i != -1){ x=i+1; i=i+2; }  
else x=i;
```

- (a) what is the final value of x if i is -1. Answer ____
(b) what is the final value of x if i is 0. Answer ____
(c) what is the final value of x if i is 1. Answer ____

>>> STOP CHRONOMETER AND WRITE DOWN THE TIME RECORDED <<<

Minutes	Seconds	100ms of a second

5. SET CHRONOMETER AT ZERO.

Minutes	Seconds	100ms of a second
0	0	0

>>> START CHRONOMETER <<<

Given the program fragment below

```
if(i>0) x=i+1;
else x=i;
i=x+1;
x=x+1;
```

- (a) what is the final value of i if the initial value of i is -1. Answer ____
(b) what is the final value of i if the initial value of i is 0. Answer ____
(c) what is the final value of i if the initial value of i is 1. Answer ____

>>> STOP CHRONOMETER AND WRITE DOWN THE TIME RECORDED <<<

Minutes	Seconds	100ms of a second

6. SET CHRONOMETER AT ZERO.

Minutes	Seconds	100ms of a second
0	0	0

>>> START CHRONOMETER <<<

Given the C program fragment below

```
x = -1;  
i = -2;
```

- (a) what is the final value of x if i is -1. Answer ____
- (b) what is the final value of x if i is 0. Answer ____
- (c) what is the final value of x if i is 1. Answer ____

>>> STOP CHRONOMETER AND WRITE DOWN THE TIME RECORDED <<<

Minutes	Seconds	100ms of a second

7. List the preceding question numbers according to how hard you found them to answer. The first element of the list should be the question you found hardest to answer.