

## MCS Programmer Evaluation

Please review the sample “C” program below and answer the following questions.

```
#define RO_OFF 0
#define RO_ON 1
#define Temp_Sensor 0
#define Pressure_Sensor 1
#define Max_Sensors 2
#define Temp_control 0x80
#define Pressure_control 0x00

Byte control_bit = 0x3F;
Byte control_mode;
Byte relay_output[2] = {RO_ON, RO_OFF};
Byte *control_mode_pointer;
Struct
{
    Byte type;
    Int value;
}sensor[Max_Sensors];

for (loop=0; loop<Max_Sensors; loop++)
{
    sensor[loop].type = loop;
    sensor[loop].value = 50 * (loop+1);
}

if ((control_bit & 0x80) == Temp_control)
    control_mode = Temp_control;
else
    control_mode = Pressure_control;

control_mode_ptr = &control_mode;
```

1. What is the value in control mode after the program runs?
2. What is the value in sensor[0].type?
3. What is the value in sensor[1].value?
4. What is the value of relay\_output[0]?
5. Write a statement to test relay\_output equal to ON.
6. What is the value of `“*control_mode_ptr”`?
7. What is the value of `“control_mode_ptr”` ?