Evaluating Expressions in C

Design of Embedded Computer Systems

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February 2020

The following codes were compiled without errors.
When they were executed,
each generated an output.

Could you please say for each one,
what is the output generated
justifying your response?

Problem № 1

```
#include <stdio.h>

int x,
a = 0, b = 1, c = 32, d = 4, e = 1, f = 2;

int
main()
{
x = a || b == c && d << e + f;

printf( "%d\n", x );
return 0;

} /* main */
```

Problem № 2

```
#include <stdio.h>

int
main()
{
int result, w = 3, x = 8, y = 4, z = 3;

result = w*x / y*z;

printf( "%d\n", result );
return 0;

} /* main */
```

Problem № 3

```
#include <stdio.h>

int a[5] = { 0, 1, 2, 3, 4 };
int b[5] = { 5, 6, 7, 8, 9 };

int
main()
{
int result, i = 2;

result = a[i++] + b[i];
printf( "%d\n", result );
return 0;

} /* main */
```

Problem № 4

```
#include <stdio.h>

int n = -6;
unsigned m = 3;
int result;

main()
{
result = n/m;

printf( "%d\n", result );
return 0;

} /* main */
```

Problem № 5

```
#include <stdio.h>

int
main()
{
float a = 0.2, b = 0.5, c = 0.8;

if( a < b < c )
   puts( "a < b < c" );
else
   puts( "(a < b ) > c)" );

return 0;

} /* main */
```

END OF PRESENTATION