

1. What will be the output of the following C program?

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

```
int main() {  
    int a = 12;  
    printf("%d", a & 4);  
    return 0;  
}
```

- A. 0**
- B. 4
- C. 12
- D. 8

2. What will be the output of the following C program?

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

```
int main() {  
    int a = 6;  
    printf("%d", a | 1);  
    return 0;  
}
```

- A. 6
- B. 7**
- C. 5
- D. 1

3. What will be the output of the following C program?

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

```
int main() {  
    int a = 5;  
    printf("%d", a ^ 3);  
    return 0;  
}
```

- A. 5
- B. 6**
- C. 8
- D. 3

4. What will be the output of the following C program?

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

```
int main() {  
    int x = 2;  
    printf("%d", x << 2 + 1);  
    return 0;  
}
```

- A. 8
- B. 16**
- C. 12
- D. 4

5. What will be the output of the following C program?

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

```
int main() {  
    int x = 32;  
    printf("%d", x >> 3);  
    return 0;  
}
```

- A. 2
- B. 4**
- C. 8
- D. 16

6. What will be the output of the following C program?

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

```
int main() {  
    int a = 0;  
    printf("%d", !a && a++);  
    return 0;  
}
```

- A. 1
- B. 0**
- C. 1
- D. Undefined behavior

7. What will be the output of the following C program?

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

```
int main() {  
    int a = 5;  
    printf("%d", a && a--);  
    return 0;  
}
```

- A. 5
- B. 1**
- C. 0
- D. Undefined behavior

8. What will be the output of the following C program?

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

```
int main() {  
    int a = 4;  
    printf("%d", a > 3 ? a << 1 : a >> 1);  
    return 0;  
}
```

- A. 2
- B. 8**
- C. 4
- D. 1

9. What will be the output of the following C program?

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

```
int main() {  
    int a = 10;  
    printf("%d", sizeof(a + 5));  
    return 0;  
}
```

A. 2

B. 4

C. 8

D. Undefined behavior

10. What will be the output of the following C program?

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

```
int main() {  
    int a = 3;  
    a += a *= 2;  
    printf("%d", a);  
    return 0;  
}
```

A. 6

B. Undefined behavior

C. 9

D. 12

11. What will be the output of the following C program?

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

```
int main() {  
    int a = 7;  
    printf("%d", a & (a << 1));  
    return 0;  
}
```

- A. 7
- B. 6**
- C. 14
- D. 0

12. What will be the output of the following C program?

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

```
int main() {  
    int i = 1;  
    printf("%d", i++ + ++i);  
    return 0;  
}
```

- A. 3
- B. 4
- C. 5
- D. Undefined behavior**

13. What will be the output of the following C program?

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

```
int main() {  
    int a = 5;  
    printf("%d", a > 10 || a < 10);  
    return 0;  
}
```

- A. 5
- B. 1**
- C. 0
- D. Undefined behavior

14. What will be the output of the following C program?

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

```
int main() {  
    int a = 1;  
    printf("%d", a = a + 1 == 2);  
    return 0;  
}
```

A. 2

B. 1

C. 0

D. Undefined behavior

15. What will be the output of the following C program?

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

```
int main() {  
    int a = 5;  
    printf("%d", a << 1 == 10);  
    return 0;  
}
```

A. 10

B. 1

C. 0

D. Compilation error

16. What will be the output of the following C program?

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

```
int main() {  
    int x = 5;  
    printf("%d", x++ + x++ + x);  
    return 0;  
}
```

- A. 15
- B. Undefined behavior**
- C. 16
- D. 17

17. What will be the output of the following C program?

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

```
int main() {  
    int a = 8;  
    printf("%d", a & ~a);  
    return 0;  
}
```

- A. 8
- B. 1
- C. 0**
- D. Undefined behavior

18. What will be the output of the following C program?

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

```
int main() {  
    int a = 2;  
    printf("%d", a < 5 && a << 1);  
    return 0;  
}
```

- A. 2
- B. 1**
- C. 4
- D. 0

19. What will be the output of the following C program?

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

```
int main() {  
    int i = 0;  
    printf("%d", i++ && ++i);  
    return 0;  
}
```

- A. 1
- B. 2
- C. 0**
- D. Undefined behavior

20. What will be the output of the following C program?

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

```
int main() {  
    int a = 10;  
    printf("%d", a % 3 << 1);  
    return 0;  
}
```

- A. 2
- B. 4**
- C. 6
- D. 8