JSPM's

Jayawantrao sawant College of Engineering Hadpsar, Pune-33 Department of Information Technology Multiple Choice Questions

Unit-1

1. Which of	the follow	ing is not	a valid va	ariable name	declaration?
a) int _a3;					

- b) int a_3;
- υ) III a_3,
- c) int 3_a;
- d) int _3a

Answer:c

- 2. Variable names beginning with underscore is not encouraged. Why?
- a) It is not standardized
- b) To avoid conflicts since assemblers and loaders use such names
- c) To avoid conflicts since library routines use such names
- d) To avoid conflicts with environment variables of an operating system Answer:c
- 3. All keywords in C are in
- a) LowerCase letters
- b) UpperCase letters
- c) CamelCase letters
- d) None

Answer:a

- 4. Variable name resolving (number of significant characters for uniqueness of variable) depends on
- a) Compiler and linker implementations
- b) Assemblers and loaders implementations
- c) C language
- d) None

Answer:a

- 5. Which of the following is not a valid C variable name?
- a) int number;
- b) float rate;
- c) int variable count;
- d) int \$main;

Answer:d

- 6. Which of the following is true for variable names in C?
- a) They can contain alphanumeric characters as well as special characters

- b) It is not an error to declare a variable to be one of the keywords(like goto, static)
- c) Variable names cannot start with a digit
- d) Variable can be of any length Answer:c
- 7. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int c = 2 ^ 3;
    printf("%d\n", c);
}
```

- a) 1
- b) 8
- c) 9
- d) 0

Answer: a

8. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    unsigned int a = 10;
    a = ~a;
    printf("%d\n", a);
}
```

- a) -9
- b) 10
- c) 11
- d) 10

Answer:c

```
#include <stdio.h>
int main()
{
    if (7 & 8)
        printf("Honesty");
        if ((~7 & 0x000f) == 8)
             printf("is the best policy\n");
}
```

- a) Honesty is the best policy
 - b) Honesty
 - c) is the best policy

d) No output Answer:c

10. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int a = 2;
    if (a >> 1)
        printf("%d\n", a);
}
```

- a) 0
- b) 1
- c) 2
- d) No Output.

Answer:c

11. Comment on the output of this C code?

```
#include <stdio.h>
int main()
{
    int i, n, a = 4;
    scanf("%d", &n);
    for (i = 0; i < n; i++)
        a = a * 2;
}</pre>
```

- a) Logical Shift left
- b) No output
- c) Arithmetic Shift right
- d) bitwise exclusive OR

Answer:b

```
#include <stdio.h>
void main()
{
    int x = 97;
    int y = sizeof(x++);
    printf("x is %d", x);
}
```

- a) x is 97
- b) x is 98
- c) x is 99

d) Run time error Answer:a

13. What is the output of this C code?

```
#include <stdio.h>
void main()
{
    int x = 4, y, z;
    y = --x;
    z = x--;
    printf("%d%d%d", x, y, z);
}
```

- a) 3 2 3
- b) 2 2 3
- c) 3 2 2
- d) 2 3 3

Answer:d

14. What is the output of this C code?

```
#include <stdio.h>
void main()
{
    int x = 4;
    int *p = &x;
    int *k = p++;
    int r = p - k;
    printf("%d", r);
}
```

- a) 4
- b) 8
- c) 1
- d) Run time error

Answer:c

```
#include <stdio.h>
int main()
{
    int x = 2, y = 0;
    int z = (y++) ? y == 1 && x : 0;
    printf("%d\n", z);
    return 0;
}
```

- a) 0
- b) 1
- c) Undefined behaviour
- d) Compile time error

Answer:a

16. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 1;
    int y = x == 1 ? getchar(): 2;
    printf("%d\n", y);
}
```

- a) Compile time error
- b) Whatever character getchar function returns
- c) Ascii value of character getchar function returns
- d) 2

Answer:c

17. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 1;
    short int i = 2;
    float f = 3;
    if (sizeof((x == 2) ? f : i) == sizeof(float))
        printf("float\n");
    else if (sizeof((x == 2) ? f : i) == sizeof(short int))
        printf("short int\n");
}
```

- a) float
- b) short int
- c) Undefined behaviour
- d) Compile time error

Answer:a

```
#include <stdio.h>
int main()
{
   int a = 2;
   int b = 0;
   int y = (b == 0) ? a :(a > b) ? (b = 1): a;
   printf("%d\n", y);
```

- a) Compile time error
- b) 1
- c) 2
- d) Undefined behaviour

19. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int y = 1, x = 0;
    int l = (y++, x++) ? y : x;
    printf("%d\n", l);
}
```

- a) 1
- b) 2
- c) Compile time error
- d) Undefined behaviour

Answer:a

19. Comment on the output of this C code?

```
#include <stdio.h>
void main()
{
    int k = 8;
    int m = 7;
    int z = k < m ? k = m : m++;
    printf("%d", z);
}</pre>
```

- a) Run time error
- b) 7
- c) 8
- d) Depends on compiler

Answer:b

20. The code snippet below produces

```
#include <stdio.h>
void main()
{
    1 < 2 ? return 1 : return 2;
}</pre>
```

- a) returns 1
- b) returns 2
- c) Varies
- d) Compile time error

21. What is the difference between the following 2 codes?

```
#include <stdio.h> //Program 1
int main()
{
    int d, a = 1, b = 2;
    d = a++ + ++b;
    printf("%d %d %d", d, a, b);
}
#include <stdio.h> //Program 2
int main()
{
    int d, a = 1, b = 2;
    d = a++ + ++b;
    printf("%d %d %d", d, a, b);
}
```

- a) No difference as space doesn't make any difference, values of a, b, d are same in both the case
 - b) No difference as space doesn't make any difference, values of a, b, d are different
 - c) Program 1 has syntax error, program 2 is not
 - d) Program 2 has syntax error, program 1 is not
- b) Answer:a
- 22. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int a = 1, b = 1, c;
    c = a++ + b;
    printf("%d, %d", a, b);
}

a) a = 1, b = 1
b) a = 2, b = 1
c) a = 1, b = 2
d) a = 2, b = 2
Answer:b
```

```
#include <stdio.h>
int main()
{
```

```
int a = 1, b = 1, d = 1;
            printf("%d, %d, %d", ++a + ++a+a++, a++ + ++b, ++d + d++ + a++);
a) 15, 4, 5
b) 9, 6, 9
c) 9, 3, 5
d) 6, 4, 6
Answer:a
24. For which of the following, "PI++;" code will fail?
a) #define PI 3.14
b) char *PI = "A";
c) float PI = 3.14;
d) Both (A) and (B)
Answer:a
25. What is the output of this C code?
        #include <stdio.h>
        int main()
            int a = 10, b = 10;
            if (a = 5)
            b--;
            printf("%d, %d", a, b--);
        }
a) a = 10, b = 9
```

26. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int i = 0;
    int j = i++ + i;
    printf("%d\n", j);
}
```

- a) 0
- b) 1
- c) 2
- d) Compile time error

b) a = 10, b = 8 c) a = 5, b = 9 d) a = 5, b = 8 Answer:c

Answer:a

27. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int i = 2;
    int j = ++i + i;
    printf("%d\n", j);
}
```

- a) 6
- b) 5
- c) 4
- d) Compile time error

Answer:a

28. Comment on the output of this C code?

```
#include <stdio.h>
int main()
{
    int i = 2;
    int i = i++ + i;
    printf("%d\n", i);
}
```

- a) = operator is not a sequence point
- b) ++ operator may return value with or without side effects
- c) it can be evaluated as (i++)+i or i+(++i)
- d) Both a and b

Answer:a

- 29. #include is called
- a) Preprocessor directive
- b) Inclusion directive
- c) File inclusion directive
- d) None of the mentioned

Answer:a

- 30. C preprocessors can have compiler specific features.
- a) true
- b) false
- c) Depends on the standard
- d) Depends on the platform

Answer:a

- 31. C preprocessor is conceptually the first step during compilation
- a) true
- b) false
- c) Depends on the compiler
- d) Depends on the standard

Answer:a

- 32. Preprocessor feature that supply line numbers and filenames to compiler is called?
- a) Selective inclusion
- b) macro substitution
- c) Concatenation
- d) Line control

Answer:d

- 33. #include are files and #include "somefile.h" files.
- a) Library, Library
- b) Library, user-created header
- c) User-created header, library
- d) They can include all types of file

Answer:d

- 34. A preprocessor is a program
- a) That processes its input data to produce output that is used as input to another program
- b) That is nothing but a loader
- c) That links various source files
- d) All of the mentioned

Answer:a

35. The sequence of allocation and deletion of variables for the following code is.

```
#include <stdio.h>
int main()
{
    int a;
    {
       int b;
    }
}
```

- a) a->b, a->b
- b) a->b, b->a
- c) b->a, a->b
- d) b->a, b->a

Answer:b

42. Arra	y sizes	are optional	during	array	declaration	by	using	keyword.
----------	---------	--------------	--------	-------	-------------	----	-------	----------

- a) auto
- b) static
- c) extern
- d) register
- 43. What is the output of this C code?

- a) 4
- b) 3
- c) 0
- d) Undefined

Answer:a

44. What is the output of this C code?

```
#include <stdio.h>
int x = 5;
void main()
{
    int x = 3;
    m();
    printf("%d", x);
}
void m()
{
    x = 8;
    n();
}
void n()
{
    printf("%d", x);
}
```

- a) 83
- b) 38
- c) 85
- d) 53

Answer:a

45. What is the output of this C code?

```
#include <stdio.h>
int x;
void main()
{
    m();
    printf("%d", x);
}
void m()
{
    x = 4;
}
```

- a) 0
- b) 4
- c) Compile time error
- d) Undefined

Answer:b

46. What is the output of this C code?

```
#include <stdio.h>
static int x = 5;
void main()
{
    int x = 9;
    {
        x = 4;
    }
    printf("%d", x);
}
```

- a) 9
- b) 5
- c) 4
- d) 0

Answer:c

- a) 8
- b) 0

- c) Undefined
- d) Compile time error

48. What is the output of this C code?

```
#include <stdio.h>
void main()
{
    int x = 1, y = 0, z = 5;
    int a = x && y || z++;
    printf("%d", z);
}
```

- a) 6
- b) 5
- c) 0
- d) Varies

Answer:a

49. What is the output of this C code?

```
#include <stdio.h>
void main()
{
    int x = 1, y = 0, z = 5;
    int a = x && y && z++;
    printf("%d", z);
}
```

- a) 6
- b) 5
- c) 0
- d) Varies

```
#include <stdio.h>
int main()
{
    int x = 1, y = 0, z = 3;
    x > y ? printf("%d", z) : return z;
}
```

- a) 3
- b) 1
- c) Compile time error
- d) Run time error
- 51. What is the output of this C code(when 1 is entered)?

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

```
void main()
{
    double ch;
    printf("enter a value btw 1 to 2:");
    scanf("%lf", &ch);
    switch (ch)
    {
    case 1:
        printf("1");
        break;
    case 2:
        printf("2");
        break;
}
```

- a) Compile time error
- b) 1
- c) 2
- d) Varies

Answer:a

52. What is the output of this C code(When 1 is entered)?

```
#include <stdio.h>
void main()
{
    char *ch;
    printf("enter a value btw 1 to 3:");
    scanf("%s", ch);
    switch (ch)
    {
    case "1":
        printf("1");
        break;
    case "2":
        printf("2");
        break;
}
```

- a) 1
- b) Compile time error
- c) 2
- d) Run time error

Answer:b

53. What is the output of this C code(When 1 is entered)?

```
#include <stdio.h>
void main()
{
   int ch;
```

```
printf("enter a value btw 1 to 2:");
    scanf("%d", &ch);
    switch (ch)
    {
    case 1:
        printf("1\n");
    default:
        printf("2\n");
    }
}
```

- a) 1
- b) 2
- c) 12
- d) Run time error

54. What is the output of this C code(When 2 is entered)?

```
#include <stdio.h>
void main()
{
    int ch;
    printf("enter a value btw 1 to 2:");
    scanf("%d", &ch);
    switch (ch)
    {
      case 1:
         printf("1\n");
         break;
         printf("hi");
      default:
         printf("2\n");
    }
}
```

- a) 1
- b) hi 2
- c) Run time error
- d) 2

Answer:d

55. What is the output of this C code(When 1 is entered)?

```
#include <stdio.h>
void main()
{
   int ch;
   printf("enter a value btw 1 to 2:");
   scanf("%d", &ch);
   switch (ch, ch + 1)
   {
   case 1:
```

```
printf("1\n");
    break;
case 2:
    printf("2");
    break;
}
```

- a) 1
- b) 2
- c) 3
- d) Run time error

Answer:b

56. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int a = 1, b = 1;
    switch (a)
    {
    case a*b:
        printf("yes ");
    case a-b:
        printf("no\n");
        break;
    }
}
```

- a) yes
- b) no
- c) Compile time error
- d) yes no

Answer:c

```
#include <stdio.h>
int main()
{
    int x = 97;
    switch (x)
    {
    case 'a':
        printf("yes ");
        break;
    case 97:
        printf("no\n");
        break;
}
```

- a) yes
- b) yes no
- c) Duplicate case value error
- d) Character case value error Answer:c
- 58. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    float f = 1;
    switch (f)
    {
    case 1.0:
        printf("yes\n");
        break;
    default:
        printf("default\n");
    }
}
```

- a) yes
- b) yes default
- c) Undefined behaviour
- d) Compile time error

59. What is the output of this C code?

```
#include <stdio.h>
void main()
{
    int x = 1, z = 3;
    int y = x << 3;
    printf(" %d\n", y);
}</pre>
```

- a) -2147483648
- b) -1
- c) Run time error
- d) 8

Answer:d

```
#include <stdio.h>
void main()
{
   int x = 0, y = 2, z = 3;
   int a = x & y | z;
```

```
printf("%d", a);
}
```

- a) 3
- b) 0
- c) 2
- d) Run time error

Answer:a

61. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    reverse(1);
}
void reverse(int i)
{
    if (i > 5)
        exit(0);
    printf("%d\n", i);
    return reverse(i++);
}
```

- a) 1 2 3 4 5
- b) 1 2 3 4
- c) Compile time error
- d) Stack overflow

Answer:d

62. What is the output of this C code?

```
#include <stdio.h>
void reverse(int i);
int main()
{
    reverse(1);
}
void reverse(int i)
{
    if (i > 5)
        return ;
    printf("%d ", i);
    return reverse((i++, i));
}
```

- a) 1 2 3 4 5
- b) Segmentation fault
- c) Compilation error
- d) Undefined behaviour

Answer:a

- 63. In expression i = g() + f(), first function called depends on
- a) Compiler
- b) Associativiy of () operator
- c) Precedence of () and + operator
- d) Left to write of the expression Answer:a
- 64. What is the value of i and j in the below code?

```
#include <stdio.h>
int x = 0;
int main()
    int i = (f() + g()) \mid \mid g();
    int j = g() || (f() + g());
}
int f()
{
    if (x == 0)
        return x + 1;
    else
        return x - 1;
}
int g()
{
    return x++;
```

- a)i value is 1 and j value is 1
- b)i value is 0 and j value is 0
- c)i value is 1 and j value is undefined
- d)i and j value are undefined

65. What is the value of i and j in the below code?

```
#include <stdio.h>
int x = 0;
int main()
{
    int i = (f() + g()) | g(); //bitwise or
    int j = g() | (f() + g()); //bitwise or
}
int f()
{
    if (x == 0)
        return x + 1;
    else
        return x - 1;
}
int g()
{
    return x++;
```

}

- a) i value is 1 and j value is 1
- b) i value is 0 and j value is 0
- c) i value is 1 and j value is undefined
- d) i and j value are undefined

Answer:c

66. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 2, y = 0;
    int z = y && (y |= 10);
    printf("%d\n", z);
    return 0;
}
```

- a) 1
- b) 0
- c) Undefined behaviour due to order of evaluation
- d) 2

Answer:a

67. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 2, y = 0;
    int z = (y++) ? 2 : y == 1 && x;
    printf("%d\n", z);
    return 0;
}
```

- a) 0
- b) 1
- c) 2
- d)Undefined behaviour

Answer:b

```
#include <stdio.h>
int main()
{
    int x = 2, y = 0;
    int z;
    z = (y++, y);
    printf("%d\n", z);
```

```
return 0;
}
```

- a) 0
- b) 1
- c) Undefined behaviour
- d) Compilation error

Answer:b

69. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 2, y = 0, 1;
    int z;
    z = y = 1, 1 = x && y;
    printf("%d\n", 1);
    return 0;
}
```

- a) 0
- b) 1
- c) Undefined behaviour due to order of evaluation can be different
- d) Compilation error

Answer:b

70. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int y = 2;
    int z = y + (y = 10);
    printf("%d\n", z);
}
```

- a) 12
- b) 20
- c) 4
- d) Either 12 or 20

Answer:b

71. What is the final value of j in the below code?

```
#include <stdio.h>
int main()
{
```

```
int i = 0, j = 0;

if (i && (j = i + 10))

//do something

;
```

- a) 0
- b) 10
- c) Depends on the compiler
- d) Depends on language standard Answer:a
- 72. What is the final value of j in the below code?

```
#include <stdio.h>
int main()
{
    int i = 10, j = 0;
    if (i || (j = i + 10))
        //do something
    ;
}
```

- a) 0
- b) 20
- c) Compile time error
- d) Depends on language standard Answer:a
- 73. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int i = 1;
    if (i++ && (i == 1))
        printf("Yes\n");
    else
        printf("No\n");
}
```

- a) Yes
- b) No
- c) Depends on the compiler
- d) Depends on the standard
- Answer:b
- 74. function tolower(c) defined in library works for
- a) Ascii character set
- b) Unicode character set

- c) Ascii and utf-8 but not EBSIDIC character set
- d) Any character set

75. What is the output of the below code considering size of short int is 2, char is 1 and int is 4 bytes?

```
#include <stdio.h>
int main()
{
    short int i = 20;
    char c = 97;
    printf("%d, %d, %d\n", sizeof(i), sizeof(c), sizeof(c + i));
    return 0;
}
```

- a) 2, 1, 2
- b) 2, 1, 1
- c) 2, 1, 4
- d) 2, 2, 8

Answer:c

- 76. Which type conversion is NOT accepted?
- a) From char to int
- b) From float to char pointer
- c) From negative int to char
- d) From double to char

View AnswerAnswer:b

77. What will be the data type of the result of the following operation?

(float)a * (int)b / (long)c * (double)d

- a) int
- b) long
- c) float
- d) double

Answer:d

- 78. Which of the following type-casting have chances for wrap around?
- a) From int to float
- b) From int to char
- c) From char to short
- d) From char to int

Answer:b

- 79. Which of the following typecasting is accepted by C?
- a) Widening conversions
- b) Narrowing conversions

- c) Both
- d) None of the mentioned

- 80. When do you need to use type-conversions?
- a) The value to be stored is beyond the max limit
- b) The value to be stored is in a form not supported by that data type
- c) To reduce the memory in use, relevant to the value
- d) All of the mentioned

Answer: d

81.Comment on the output of this C code?

```
#include <stdio.h>
int main()
{
    float f1 = 0.1;
    if (f1 == 0.1)
        printf("equal\n");
    else
        printf("not equal\n");
}
```

- a) equal
- b) not equal
- c) Output depends on compiler
- d) None of the mentioned Answer:b

82. Comment on the output of this C code?

```
#include <stdio.h>
int main()
{
    float f1 = 0.1;
    if (f1 == 0.1f)
        printf("equal\n");
    else
        printf("not equal\n");
}
```

- a) equal
- b) not equal
- c) Output depends on compiler
- d) None of the mentioned Answer:a
- 83. What is the output of this C code (on a 32-bit machine)?

```
#include <stdio.h>
int main()
{
```

```
int x = 10000;
double y = 56;
int *p = &x;
double *q = &y;
printf("p and q are %d and %d", sizeof(p), sizeof(q));
return 0;
}
```

- a) p and q are 4 and 4
- b) p and q are 4 and 8
- c) Compiler error
- d) p and q are 2 and 8Answer:a
- 84. Which is correct with respect to size of the datatypes?
- a) char > int > float
- b) int > char > float
- c) char < int < double
- d) double > char > intAnswer:c
- 85. What is the output of the following C code(on a 64 bit machine)?

```
#include <stdio.h>
union Sti
{
    int nu;
    char m;
};
int main()
{
    union Sti s;
    printf("%d", sizeof(s));
    return 0;
}
```

- a) 8
- b) 5
- c) 9
- d) 4Answer:d
- 86. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    float x = 'a';
    printf("%f", x);
    return 0;
}
```

- a) a
- b) run time error
- c) a.0000000
- d) 97.000000

- 87. Which of the datatypes have size that is variable?
- a) int
- b) struct
- c) float
- d) double

Answer:b

88. What is the output of this C code?

```
#include <stdio.h>
void main()
{
    int a = 3;
    int b = ++a + a++ + --a;
    printf("Value of b is %d", b);
}
```

- a) Value of x is 12
- b) Value of x is 13
- c) Value of x is 10
- d) Undefined behaviour

Answer:d

89.. The precedence of arithmetic operators is (from highest to lowest)

```
a) %, *,/,+,-
```

- b) %, +, /, *, -
- c) +, -, %, *,/
- d) %, +, -, *, /

Answer:a

90. Which of the following is not an arithmetic operation?

- a) a *= 10;
- b) a = 10;
- c) a != 10;

```
d) a \% = 10;
```

91. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 2, y = 2;
    float f = y + x /= x / y;
    printf("%d %f\n", x, f);
    return 0;
}
```

- a) 2 4.000000
- b) Compile time error
- c) 2 3.500000
- d) Undefined behaviour

Answer:b

92. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 1, y = 2;
    if (x && y == 1)
        printf("true\n");
    else
        printf("false\n");
}
```

- a) true
- b) false
- c) Compile time error
- d) Undefined behaviour

Answer:b

```
#include <stdio.h>
int main()
{
   int x = 1, y = 2;
```

```
int z = x & y == 2;
printf("%d\n", z);
}
```

- a) 0
- b) 1
- c) Compile time error
- d) Undefined behaviour

Answer:b

94. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 3, y = 2;
    int z = x /= y %= 2;
    printf("%d\n", z);
}
```

- a) 1
- b) Compile time error
- c) Floating point exception
- d) Segmentation fault

Answer:c

95. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 3, y = 2;
    int z = x << 1 > 5;
    printf("%d\n", z);
}
```

- a) 1
- b) 0
- c) 3
- d) Compile time error

Answer:a

```
#include <stdio.h>
int main()
{
    int x = 3; //, y = 2;
    const int *p = &x;
    *p++;
    printf("%d\n", *p);
}
```

- a) Increment of read-only location compile error
- b) 4
- c) Some garbage value
- d) Undefined behaviour

97. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 2, y = 2;
    int z = x ^ y & 1;
    printf("%d\n", z);
}
```

- a) 1
- b) 2
- c) 0
- d) 1 or 2

Answer:b

```
#include <stdio.h>
int main()
{
    int x = 2, y = 0;
    int z = x && y = 1;
    printf("%d\n", z);
}
```

- a) 0
- b) 1
- c) Compile time error
- d) 2

99. What is the output of the code given below

```
#include <stdio.h>
int main()
{
    int x = 0, y = 2;
    if (!x && y)
        printf("true\n");
    else
        printf("false\n");
}
```

- a) true
- b) false
- c) Compile time error
- d) Undefined behaviour

Answer:a

100. What is the output of this C code?

```
#include <stdio.h>
int main()
{
    int x = 0, y = 2;
    int z = ~x & y;
    printf("%d\n", z);
}
```

- a) -1
- b) 2
- c) 0
- d) Compile time error

Answer:b