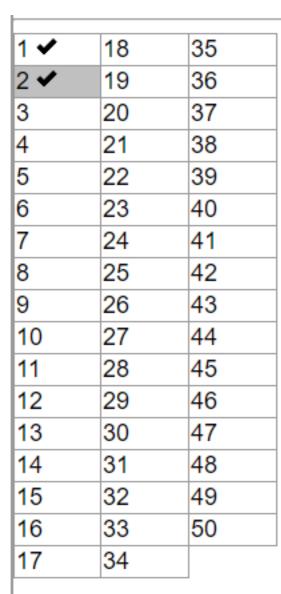


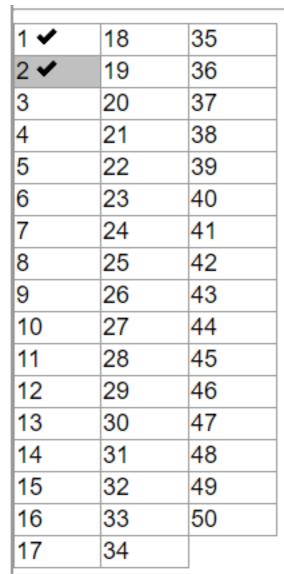
```
OAOB OCOD Clear Answer
                                    Mark For Review
                 Q. No. 2
                 What is the output of the following code snippet?
                       #include <stdio.h>
                 int main(){
                              int x = -2;
                              while (x++ || x == 0){
                                     printf("X");
                 A: X is printed 2 times
                                           B: X is printed 1 times
                 C: No Output
                                           D: X is printed infinitely
○ A ○ B ○ C ● D Clear Answer
                                    Mark For Review
                 Q. No. 3
                 What is the output of the following recursive code?
```

4	4.0	25
1 🗸	18	35
2 🗸	19	36
3	20	37
4	21	38
5	22	39
6	23	40
7	24	41
8	25	42
9	26	43
10	27	44
11	28	45
12	29	46
13	30	47
14	31	48
15	32	49
16	33	50
17	34	

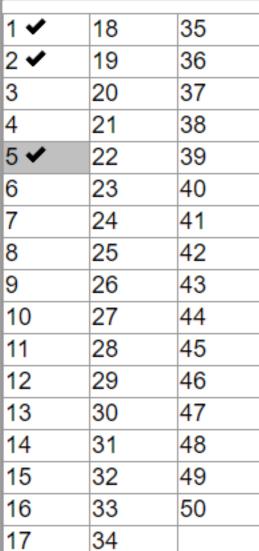
```
○ A ○ B ○ C ● D Clear Answer
                                   Mark For Review
                Q. No. 3
                What is the output of the following recursive code?
                      #include <stdio.h>
                      void recur(int);
                      int main(){
                             recur(1);
                      void recur(int num){
                             if(num<=3){
                                   printf("%d", num);
                                   recur(num++);
                                                      :123
                A: runtime error: stack overflow
                C: 111
                                                      D: 321
```

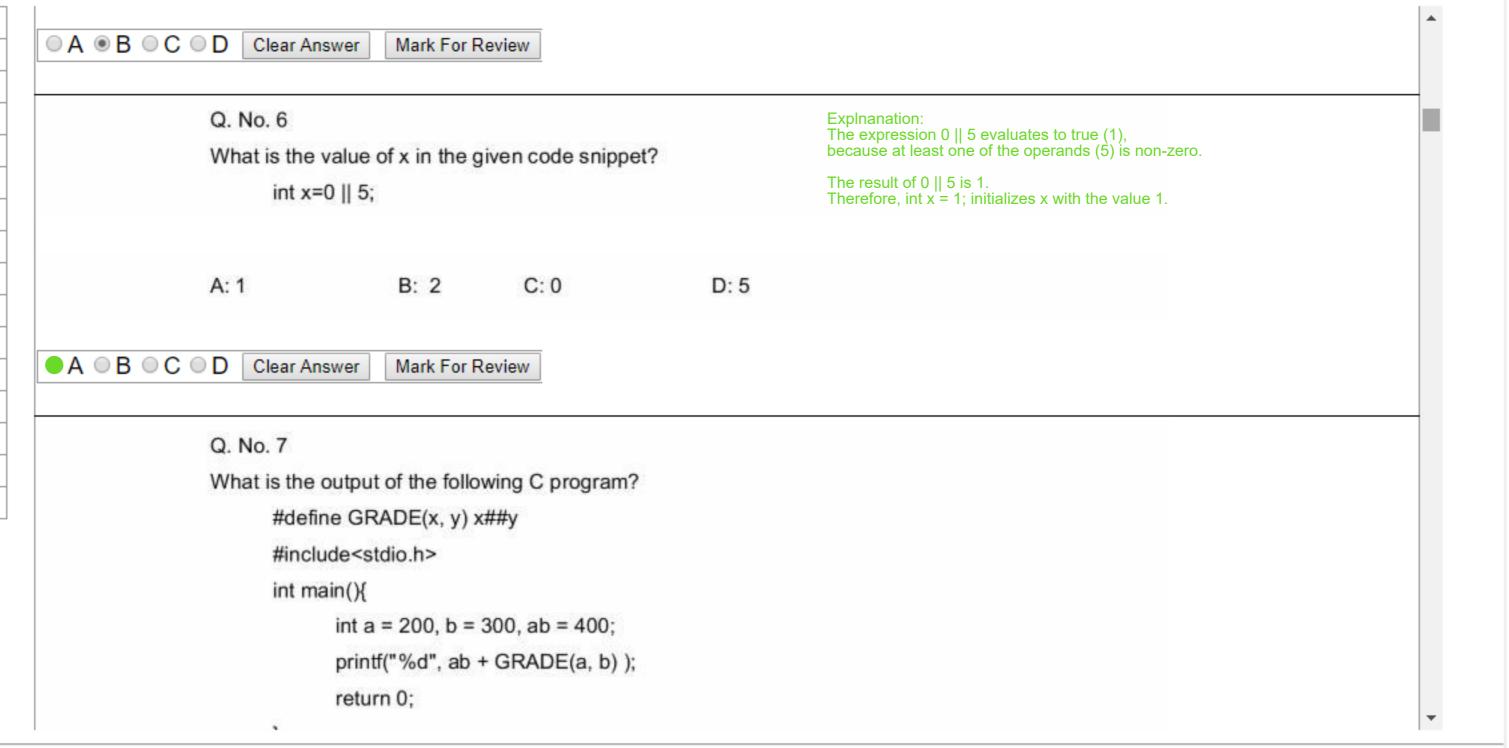


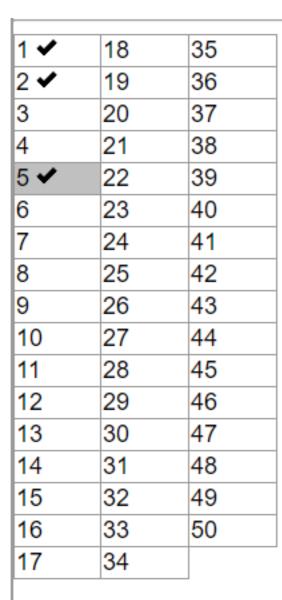
```
○ A ● B ○ C ○ D Clear Answer
                                            Mark For Review
                     Q. No. 4
                     What is the output of the following C program?
                            #include<stdio.h>
                                                                                    Explanation:
                                                                                    The program successfully prints "CDA" as expected due to the presence of '\0' (null terminator) in the array CDAC, which marks the end of the string for the printf function.
                            int main()
                                  char CDAC[6] = {'C', 'D', 'A', '\0', 'C'};
                                  printf("%s", CDAC);
                                  return 0;
                                    B: CDA\0C
                                                                    C: CDA
                                                                                    D: CDA0C
                     A: CDAC
○ A ○ B ○ C ○ D Clear Answer
                                            Mark For Review
                    Q. No. 5
                     What is the output for the given program?
                            #include <stdio.h>
```



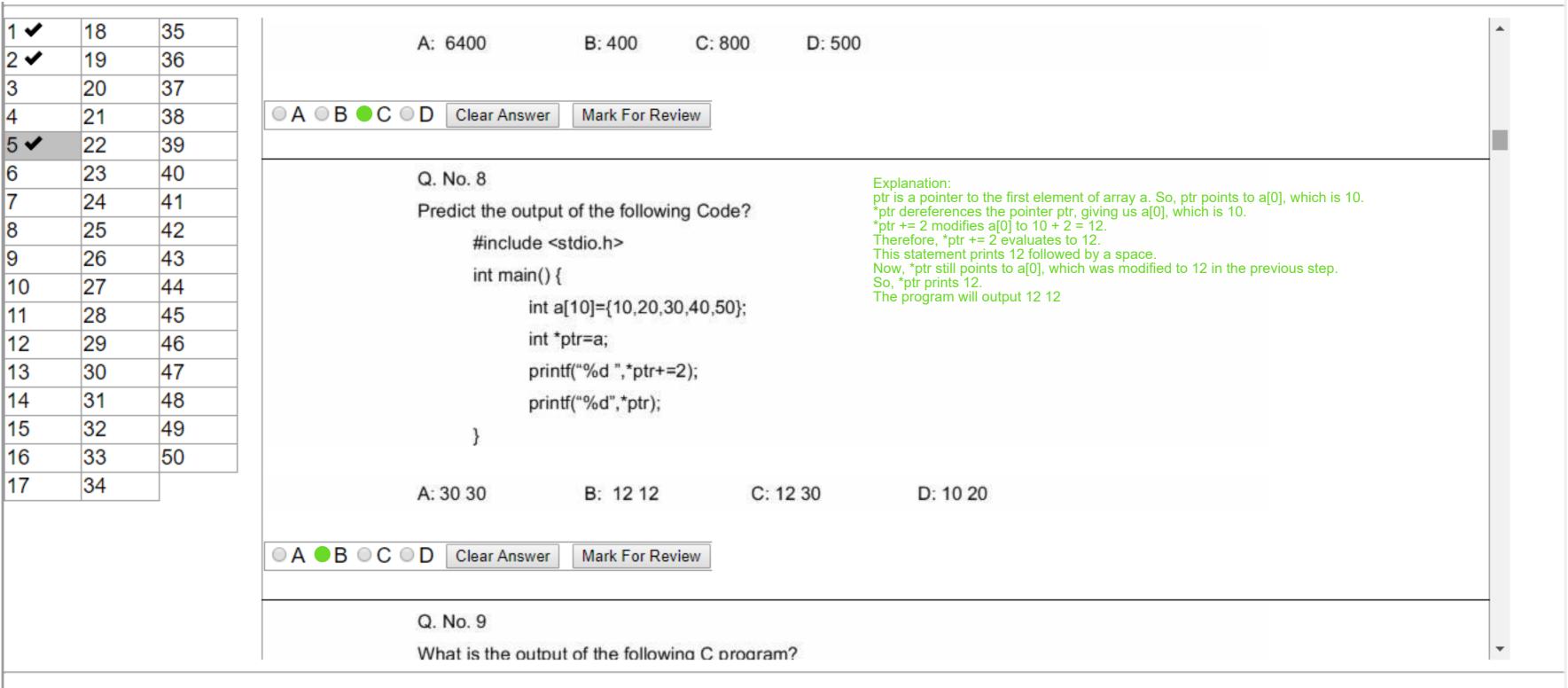
```
A: CDAC
                                           B: CDA\0C
                                                                                  C: CDA
                                                                                                     D: CDA0C
○ A ○ B ● C ○ D Clear Answer
                                                     Mark For Review
                        Q. No. 5
                         What is the output for the given program?
                                                                                                  the first printf potentially causing an error due to glob not being defined globally is valid. In standard C, extern int glob; expects a global definition of glob elsewhere in the program. Without such a definition, it may lead to issues at compile or link time.
                                  #include <stdio.h>
                                  int main () {
                                           int glob=20;
                                                     extern int glob;
                                                     printf ("%d", glob);
                                            printf ("%d", glob);
                        A: 0 0
                                            B: 020
                                                                        C: 20 0
                                                                                                     D: Linker Error
○ A ○ B ○ C ● D Clear Answer
                                                    Mark For Review
```



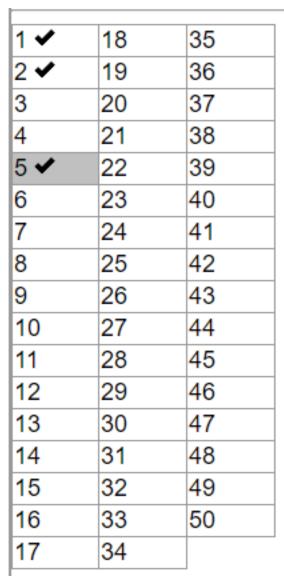




```
● A ○ B ○ C ○ D Clear Answer
                                            Mark For Review
                    Q. No. 7
                                                                                     Explanation:
                                                                                     In the printf statement:
                    What is the output of the following C program?
                                                                                     ab is 400.
                                                                                    GRADE(a, b) expands to ab because x##y concatenates a and b, forming ab. So, GRADE(a, b) effectively becomes ab. Therefore, ab + GRADE(a, b) is 400 + 400.
                            #define GRADE(x, y) x##y
                            #include<stdio.h>
                            int main(){
                                    int a = 200, b = 300, ab = 400;
                                    printf("%d", ab + GRADE(a, b));
                                    return 0;
                    A: 6400
                                            B: 400
                                                            C: 800
                                                                            D: 500
○ A ○ B ○ C ○ D Clear Answer
                                            Mark For Review
                    Q. No. 8
                    Predict the output of the following Code?
                             Hindlude cetdie h>
```



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```
○ A ○ B ○ C ○ D Clear Answer
                                                              Mark For Review
                             Q. No. 9
                                                                                                                  Explanation:
                                                                                                                  Function res(int n):
                             What is the output of the following C program?
                                                                                                                  This function uses a recursive approach to count the number of set bits
                                        #include<stdio.h>
                                                                                                                 (1s) in the binary representation of n.

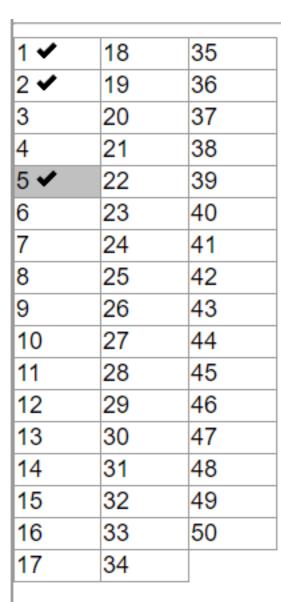
n & n-1 clears the least significant set bit of n. This operation reduces the count of set bits by one in each recursive call until n becomes 0.

The recursion stops when n is 0, returning 0.

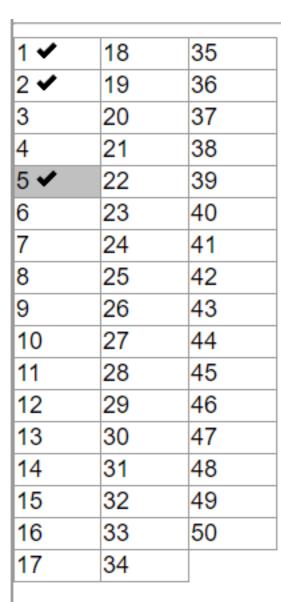
Therefore, res(n) computes the number of set bits in n.
                                        int main()
                                                                                                                  Main Function:
                                                 printf("%d", res(6));
                                                                                                                  In main(), res(6) is called.
                                                                                                                 6 in binary is 110, which has 2 set bits. So, res(6) will return 2.
                                                 return 0;
                                                                                                                  Printf Statement:
                                                                                                                  printf("%d", res(6)); prints the result returned by res(6). Output Prediction:
                                        int res(int n)
                                                                                                                 The function res(6) calculates the number of set bits in the binary representation of 6, which is 2.
                                                 return(n ? 1 + res( n & n-1 ): 0);
                             A: 2
                                                   B: 1
                                                                         C: 6
                                                                                                D: 0
● A ○ B ○ C ○ D Clear Answer
                                                              Mark For Review
```

4	40	0.5
1 🗸	18	35
2 🗸	19	36
3	20	37
4	21	38
5 ~	22	39
6	23	40
7	24	41
8	25	42
9	26	43
10	27	44
11	28	45
12	29	46
13	30	47
14	31	48
15	32	49
16	33	50
17	34	

```
Q. No. 10
                                                                                   Explanation:
                                                                                   fun() returns a pointer to a static character array, which retains its value between function calls.
                    What is the output of the following Code?
                                                                                   Function fun():
                                    #include <stdio.h>
                                                                                   fun() is defined to return a pointer to a static char array str of size 20.
                                                                                   The static keyword ensures that str persists across function calls and retains its value between calls.
                                    char *fun(){
                                                                                   It returns the address of the static array str.
                                                                                   Main Function:
                                                    static char str[20];
                                                                                   strcpy(fun(), "Hello");: Copies the string "Hello" into the memory pointed to by fun(), which is the static char str[20].
                                                    return str;
                                                                                   This modifies str to contain "Hello".
                                                                                   Printf Statement:
                                    int main(){
                                                                                   printf("%s", fun());: Prints the contents of str, which now holds "Hello".
                                                    strcpy(fun(),"Hello");
                                                                                  When printf("%s", fun()); is executed, it prints "Hello".
                                                    printf("%s ",fun());
                            A: Hello
                            B: prints nothing
                            C: compiler error, function returning address
                    D: runtime error, because you cannot copy anything to a function
●A ○B ○C ○D Clear Answer
                                           Mark For Review
                    Q. No. 11
                    What is the output of the following C program?
                            #include<stdio.h>
                            !-- ---!-- ()
```



```
O A O B O C O D Clear Answer
                                   Mark For Review
                Q. No. 11
                What is the output of the following C program?
                       #include<stdio.h>
                      int main()
                             int x = 1, y = 1;
                             x = (y = 35) + 7;
                             printf("%d %d", x, y);
                             return 0;
                A: 35 7
                             B: 7 35
                                          C: 35 42
                                                      D: 42 35
O A O B O C O D Clear Answer
                                   Mark For Review
                Q. No. 12
                What is the output for the following code snippet?
                       #include <stdio.h>
```

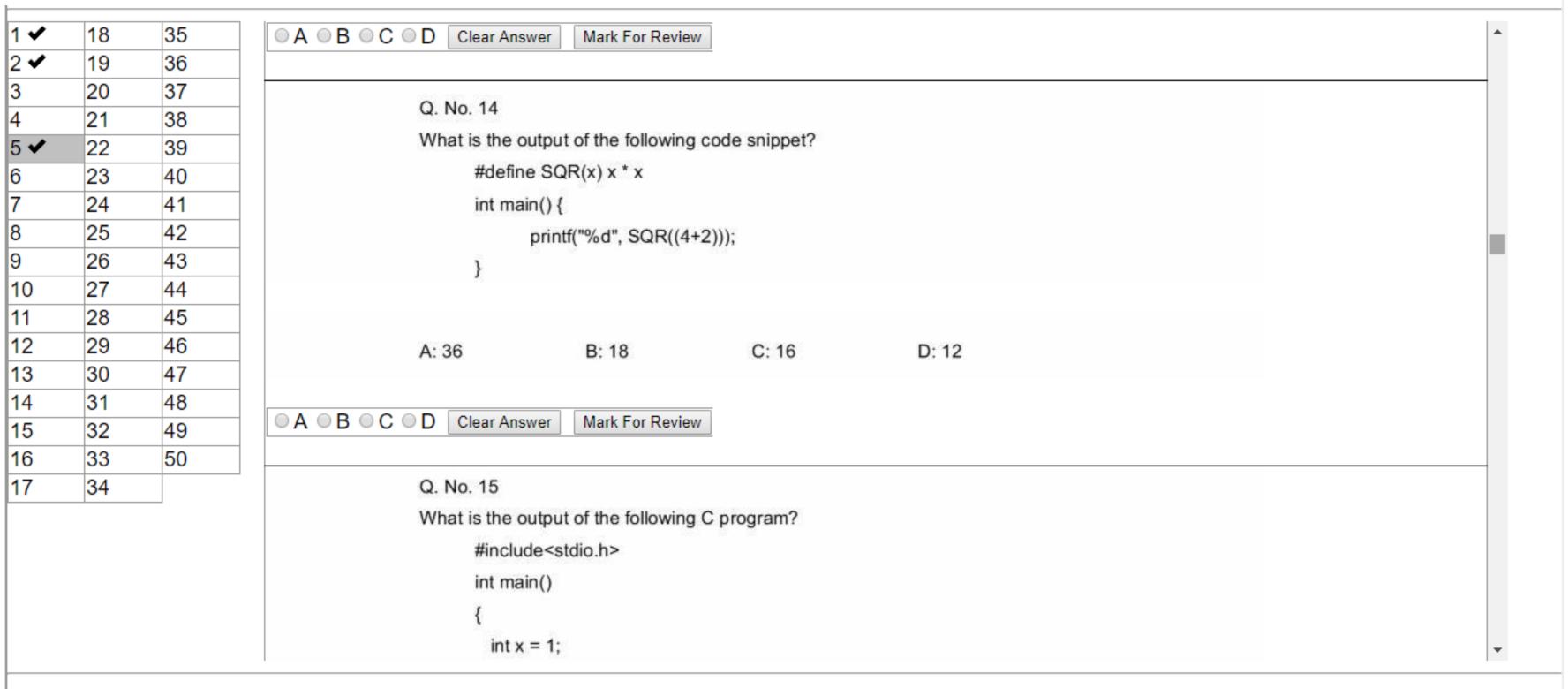


```
○ A ○ B ○ C ○ D Clear Answer
                                    Mark For Review
                Q. No. 12
                 What is the output for the following code snippet?
                       #include <stdio.h>
                       struct emp {
                             int age;
                              struct emp *ptr;
                       };
                       int main(){
                              struct emp var={24,NULL};
                              struct emp *ptr = &var;
                              ptr->ptr = ptr;
                              printf("%d %d", ptr->age,ptr->ptr->age);
                A: 24 24
                                           B: 0 0
                 C: NULL NULL
                                           D: Undefined behaviour (Runtime error)
```

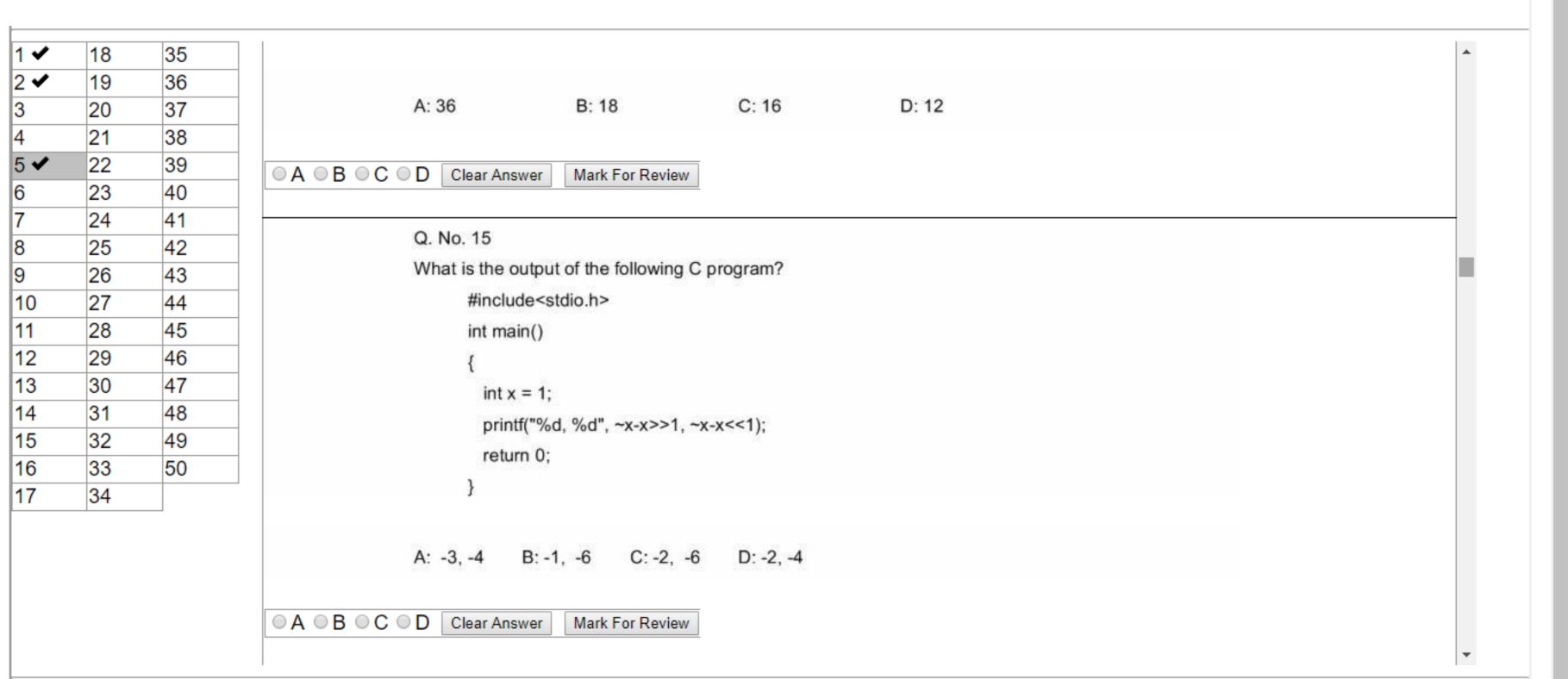
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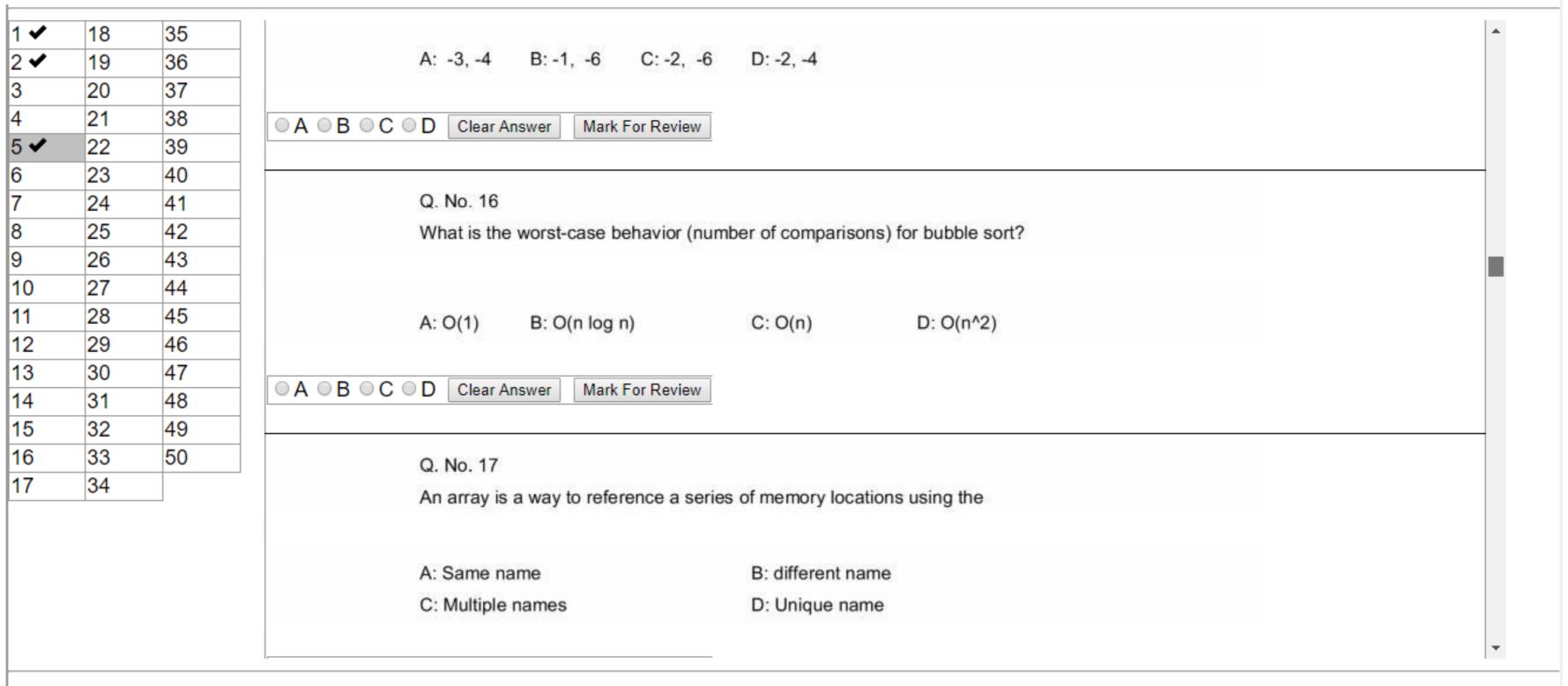
1 🗸	18	35
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4	21	38
5 🗸	22	39
6	23	40
7	24	41
8	25	42
9	26	43
10	27	44
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13	30	47
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15	32	49
16	33	50
17	34	

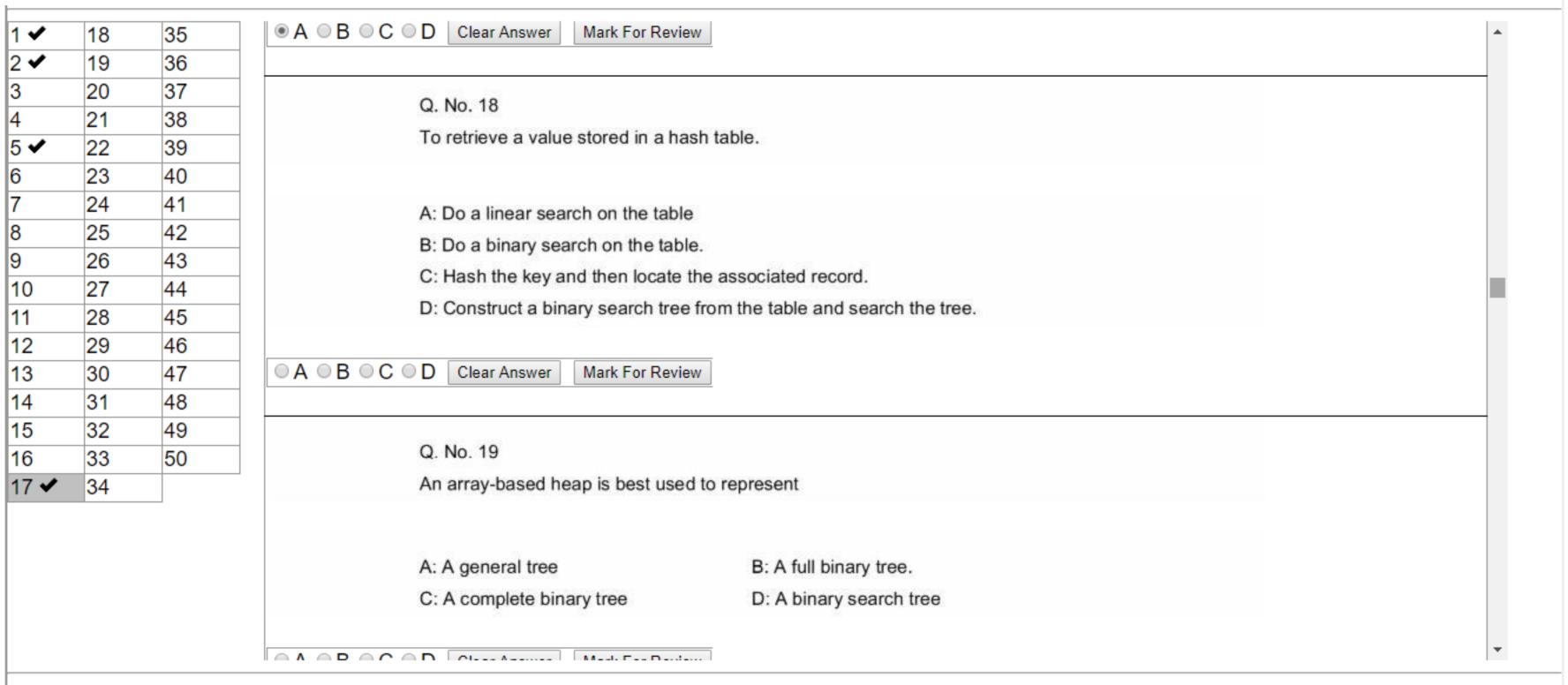
```
○ A ○ B ○ C ○ D Clear Answer
                                   Mark For Review
                Q. No. 13
                Consider the definition of the following UNION.
                             int main () {
                                    union Test{
                                          unsigned short int si;
                                          unsigned char ch[2];
                                    union Test var = {257};
                                    printf("%d %d %d", var.ch[0],var.ch[1], var.si);
                       What is the output?
                A: Compilation Error
                                                 B: Garbage Value
                C: 1 1 257
                                                 D: 267 1 1
O A O B O C O D Clear Answer
                                   Mark For Review
```

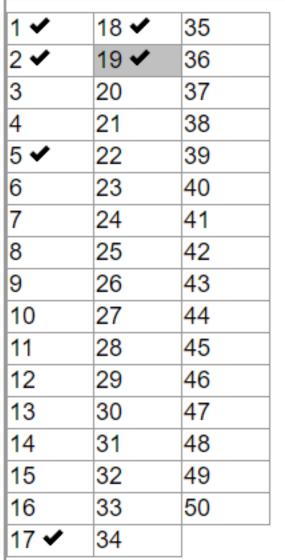


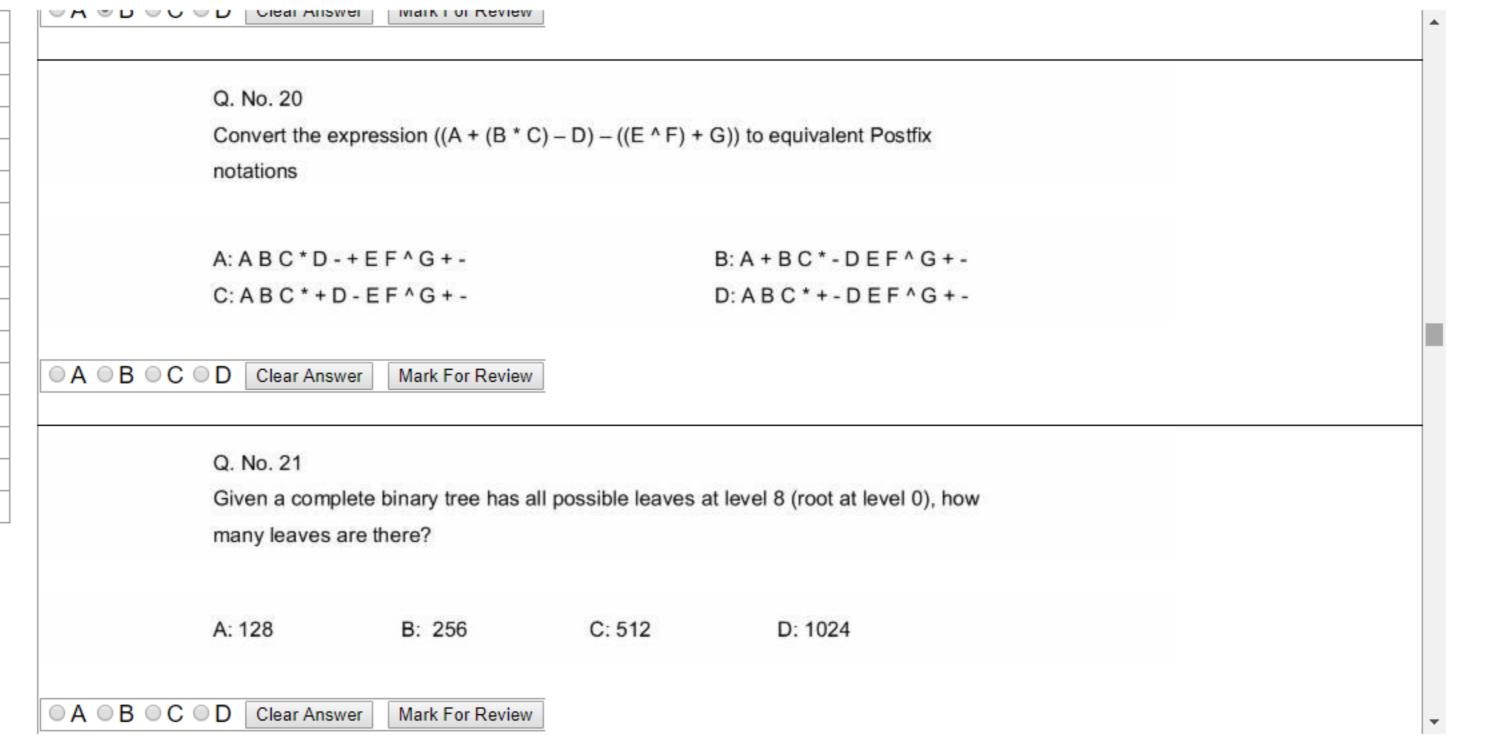
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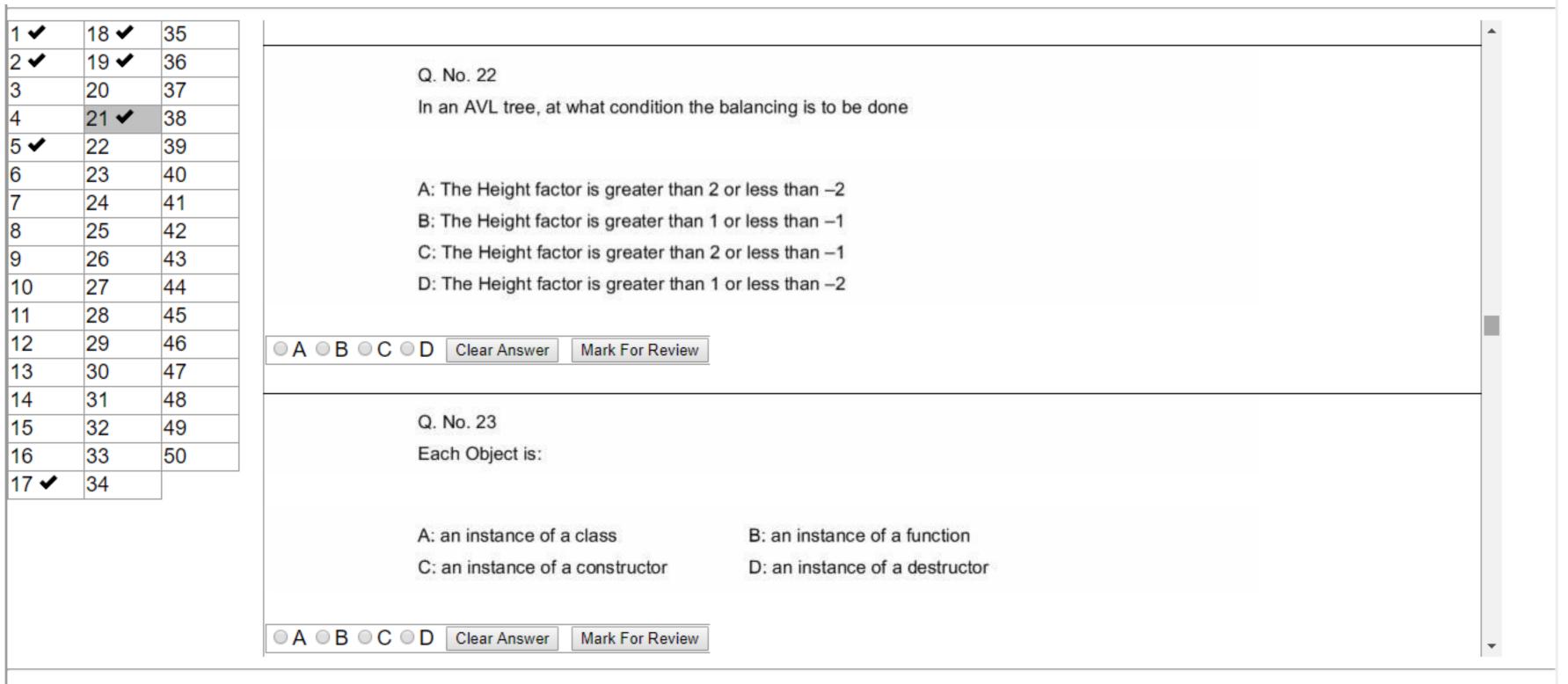


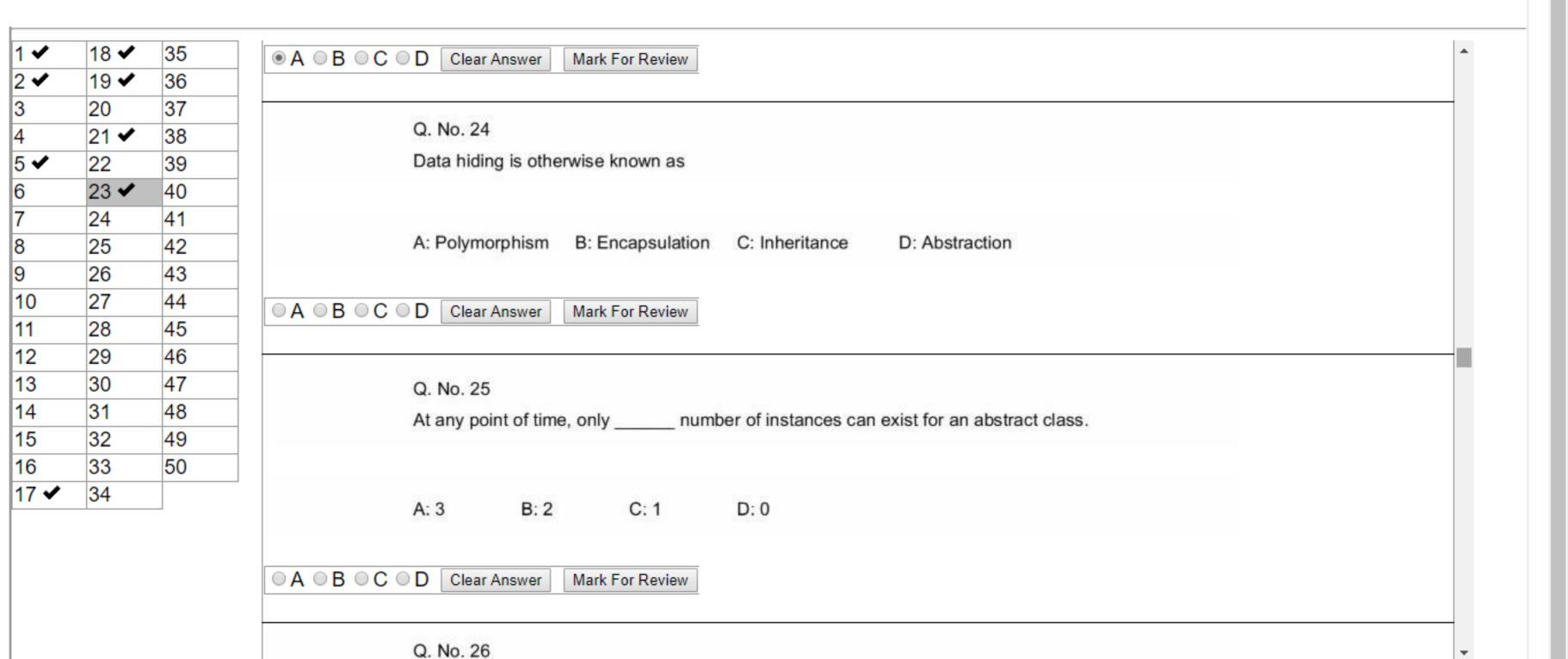


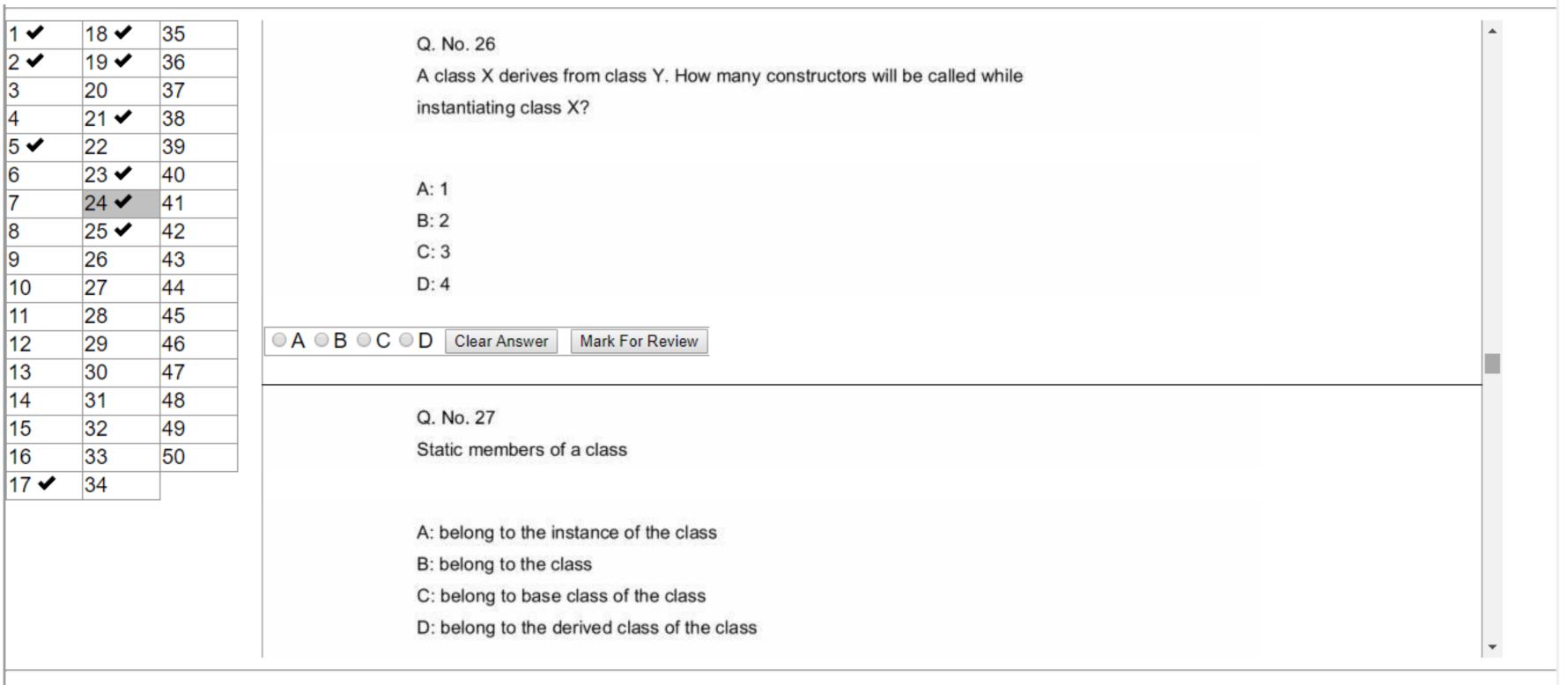








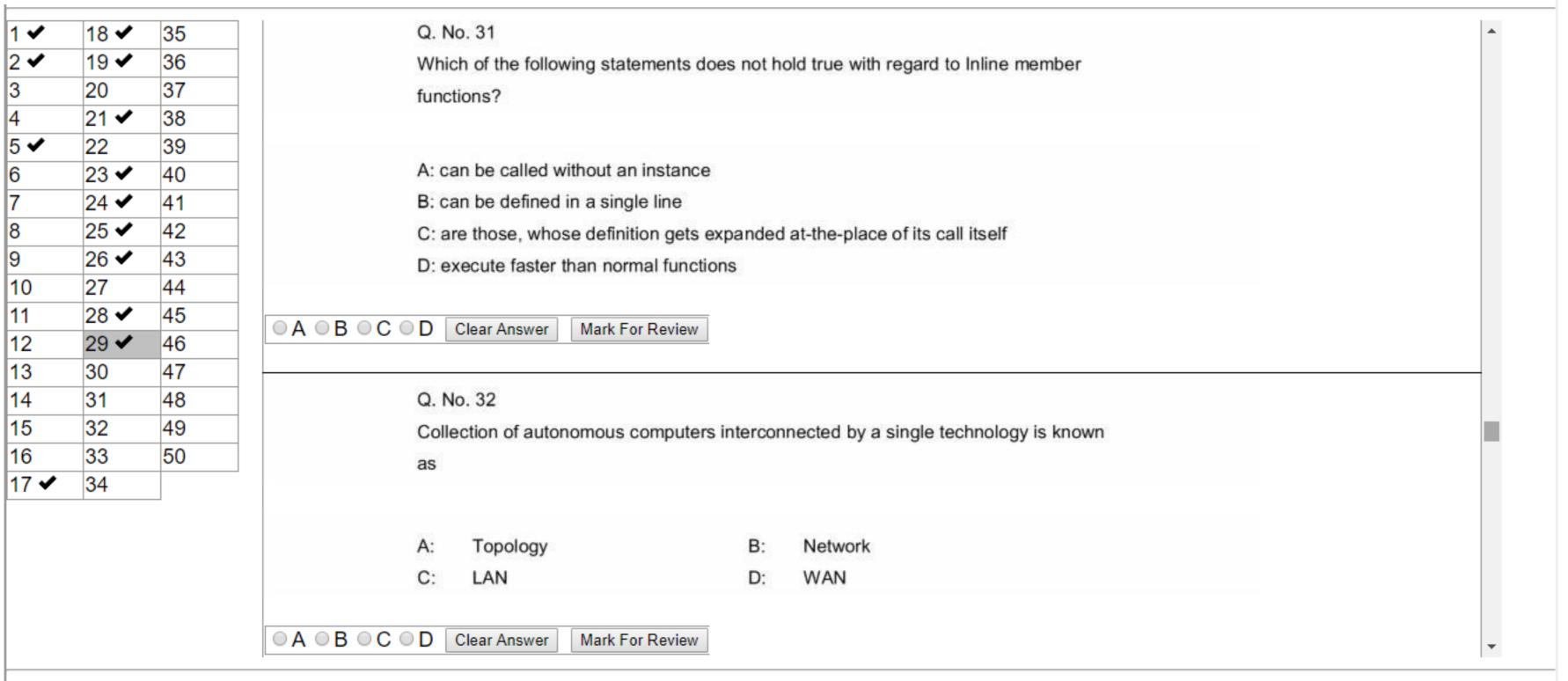


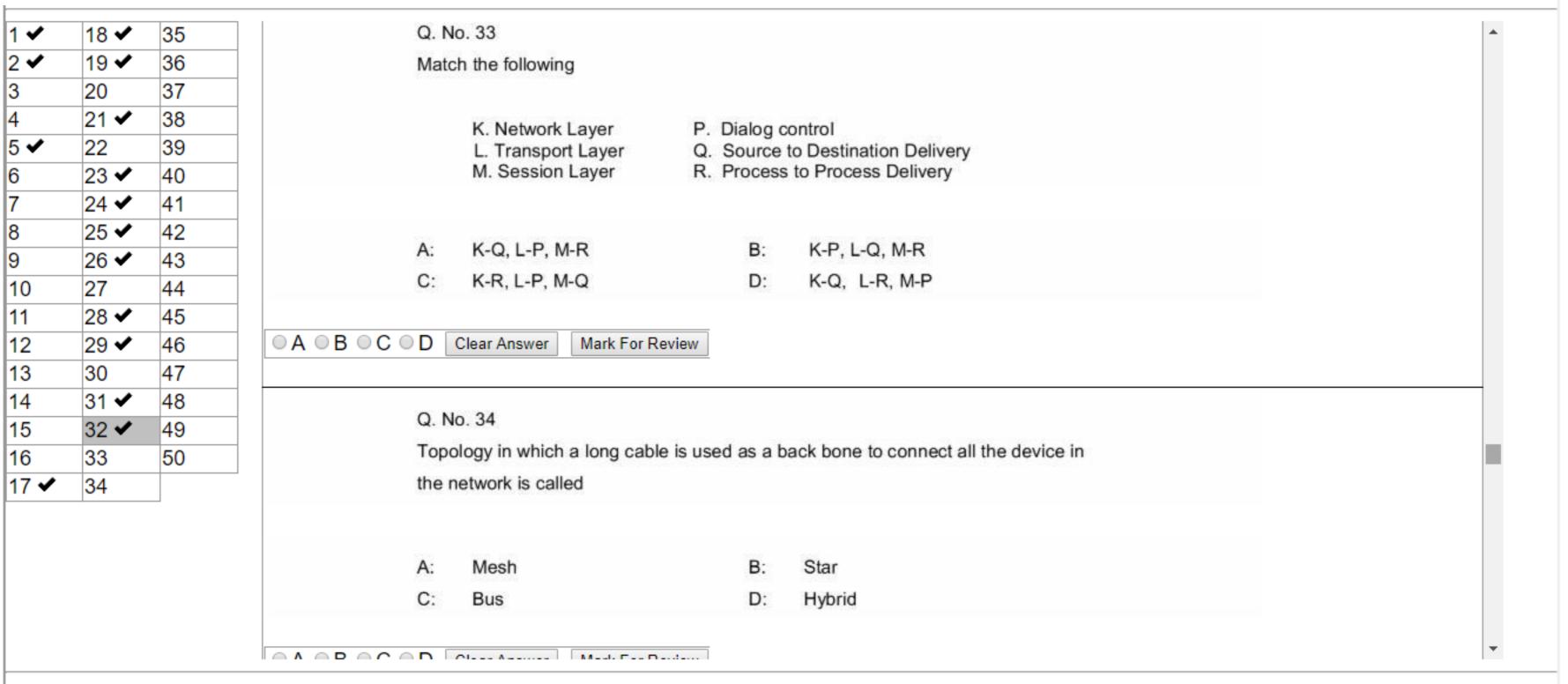


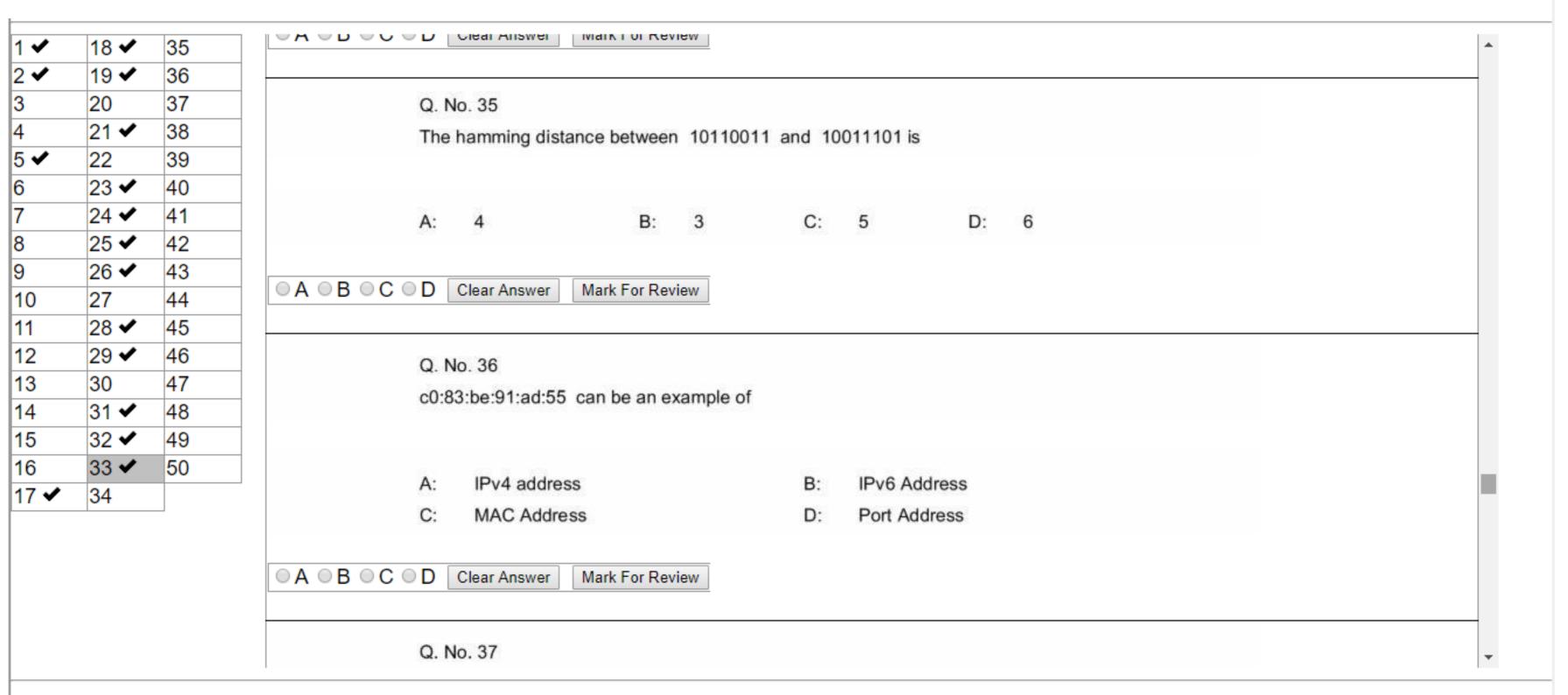


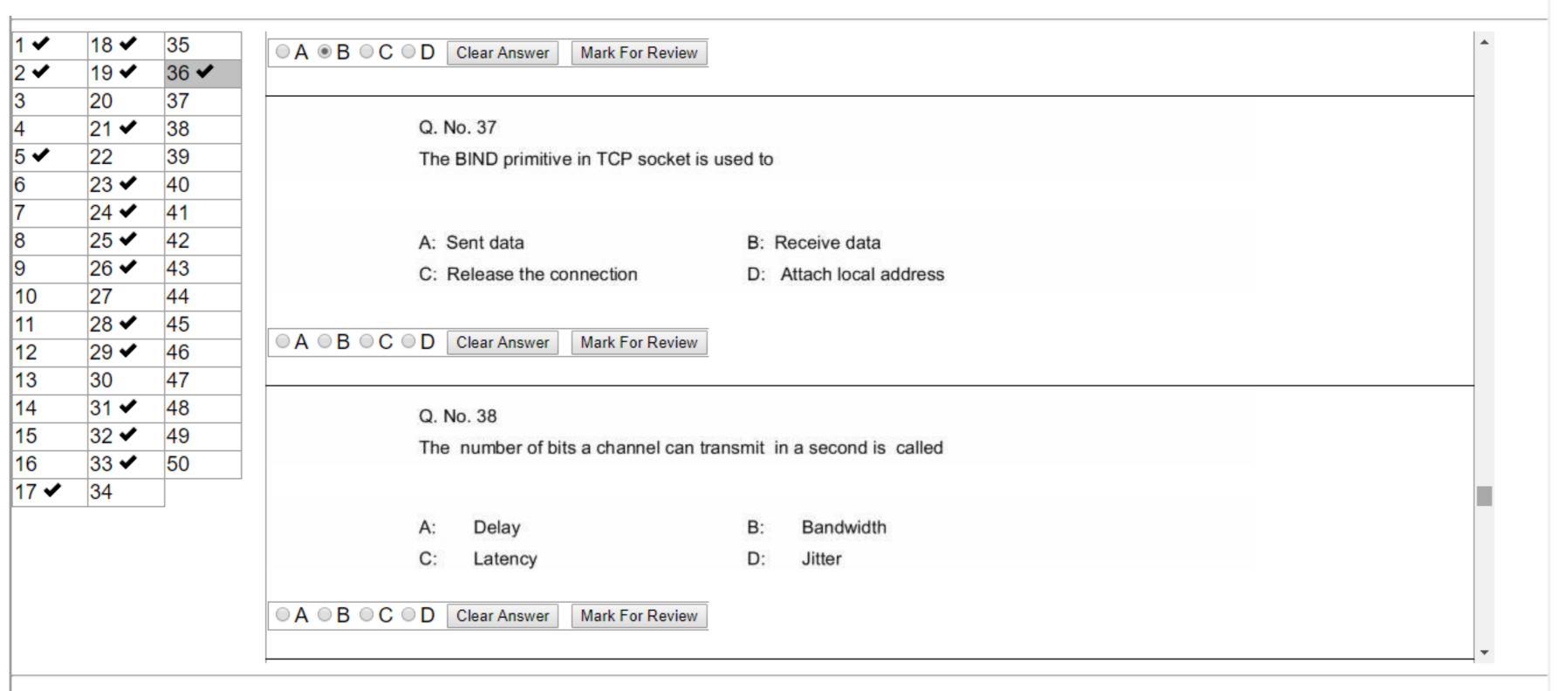
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1 🗸	18 🗸	35
2 🗸	19 🗸	36
3	20	37
4	21 🗸	38
5 ~	22	39
6	23 🗸	40
7	24 🗸	41
8	25 🗸	42
9	26 🗸	43
10	27	44
11	28 🗸	45
12	29 🗸	46
13	30	47
14	31	48
15	32	49
16	33	50
17 🗸	34	
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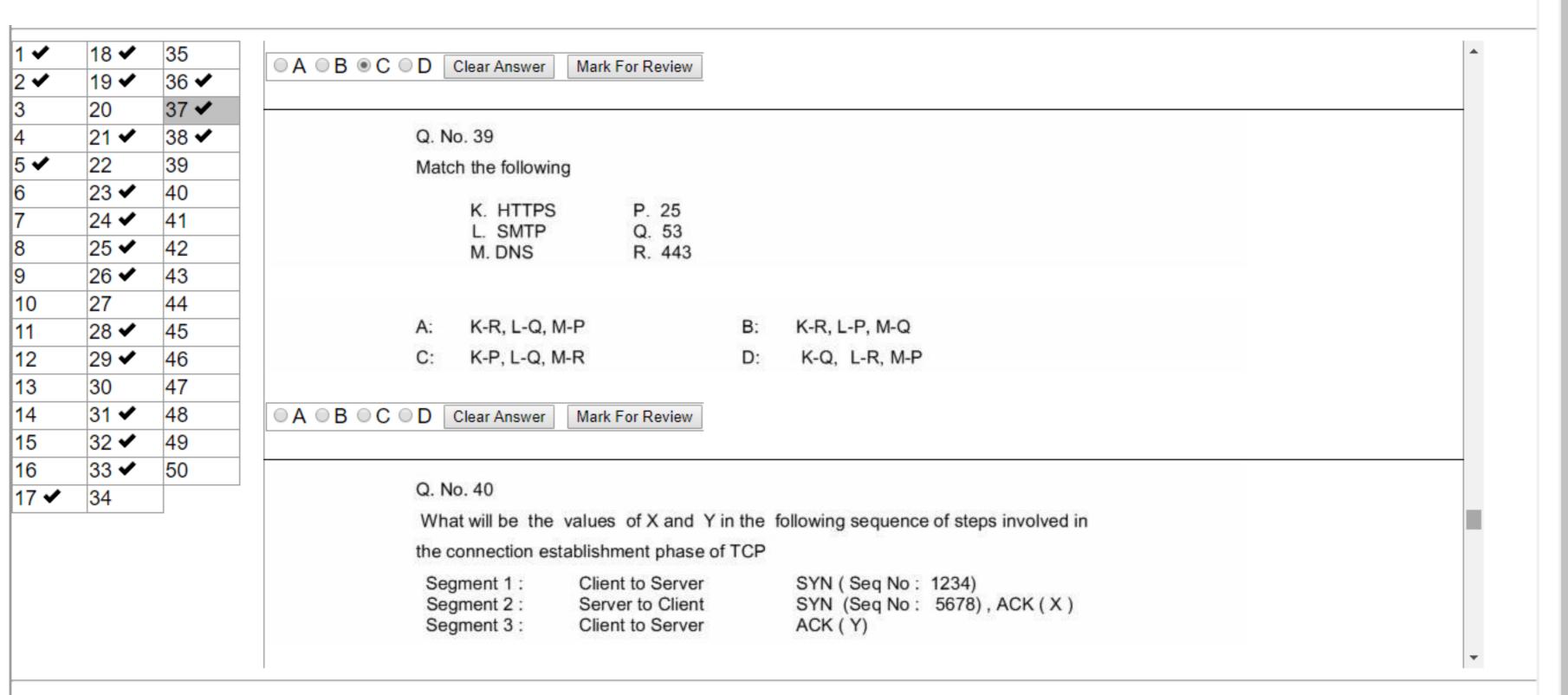
```
Q. No. 30
Which among the following statements is true with regard to this code:
class Base {
      int baseProperty;
      public : void protectMe() {
            cout << baseProperty;
class Derived: protected Base {
      int derivedProperty;
Base b;
Derived d;
b.protectMe();
d.protectMe();
A: Base class object can execute protectMe() method
B: Derived class object can execute protectMe() method
C: Both, Base class and Derived class can execute protectMe() method
D: Both Base class and Derived class cannot execute protectMe() method
```

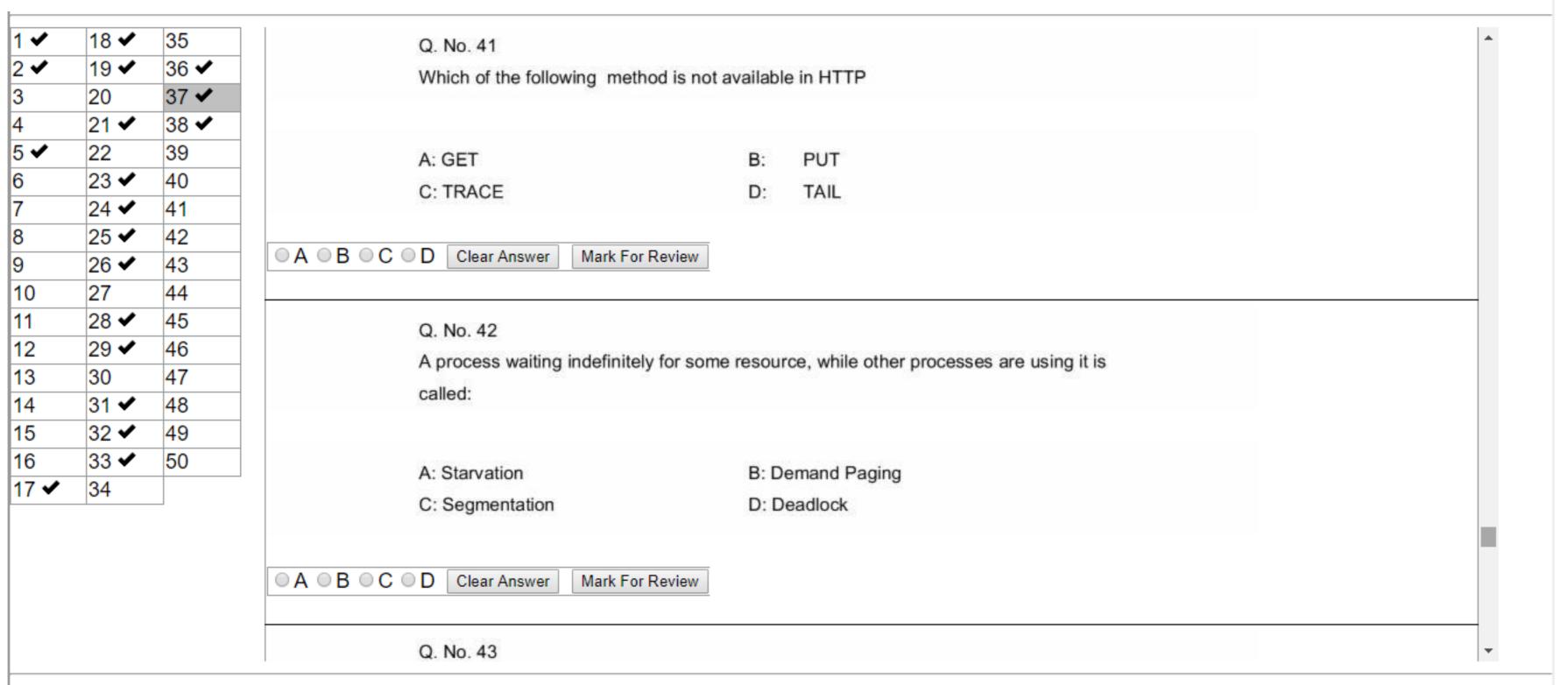


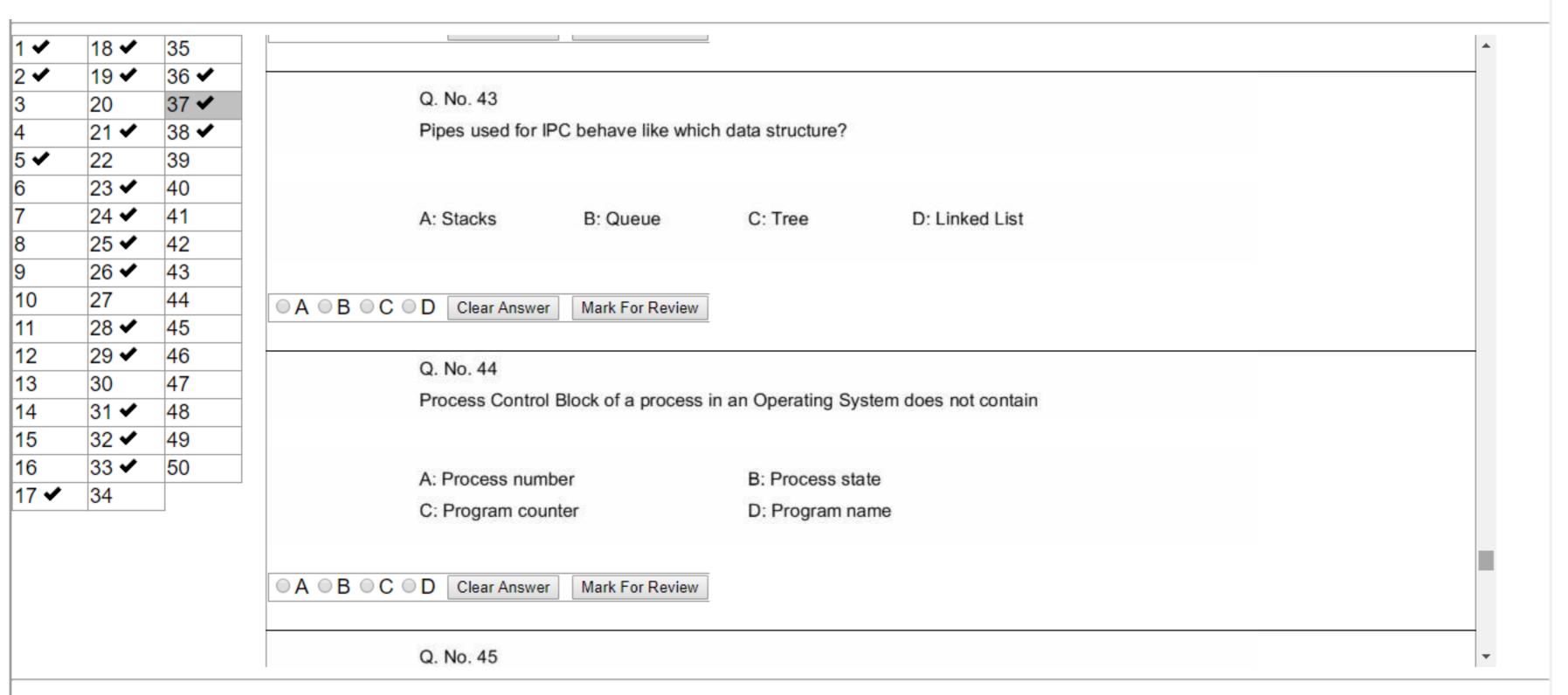


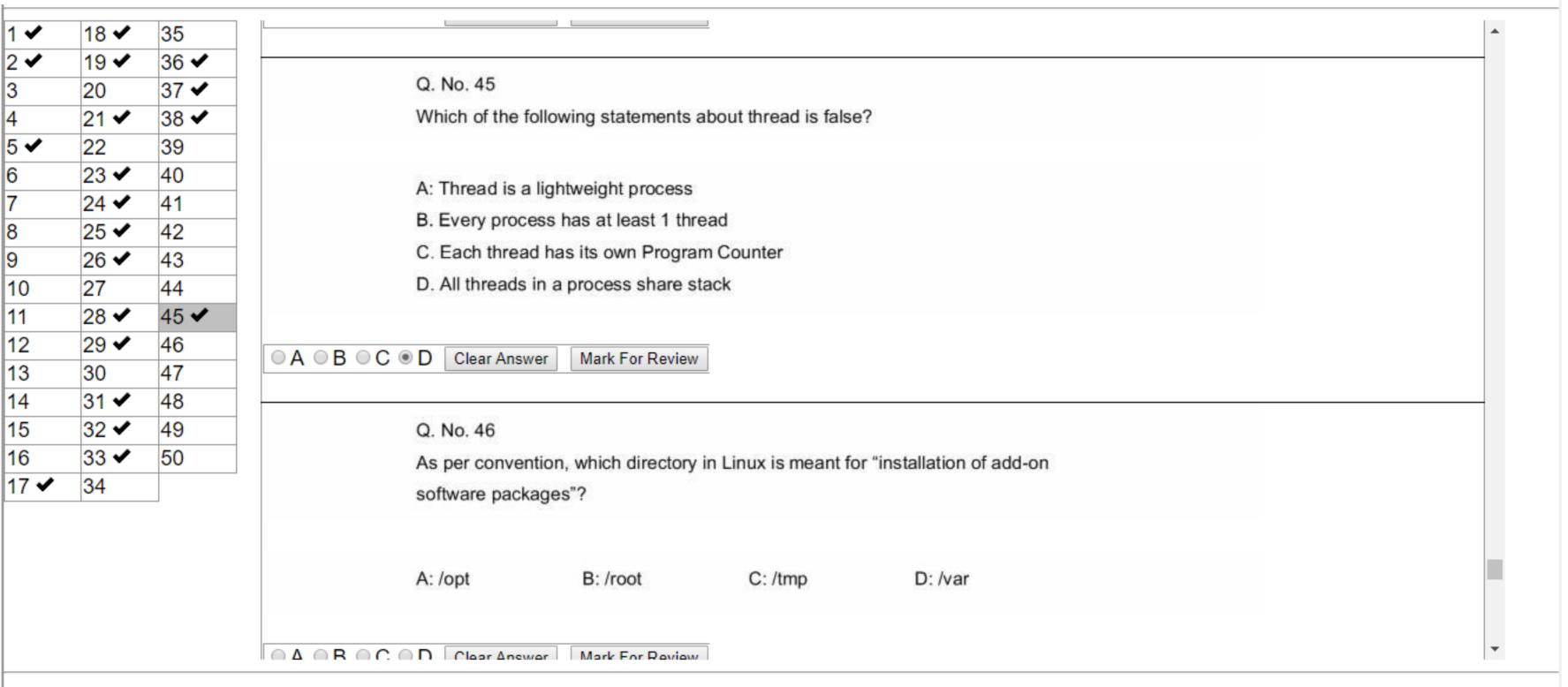


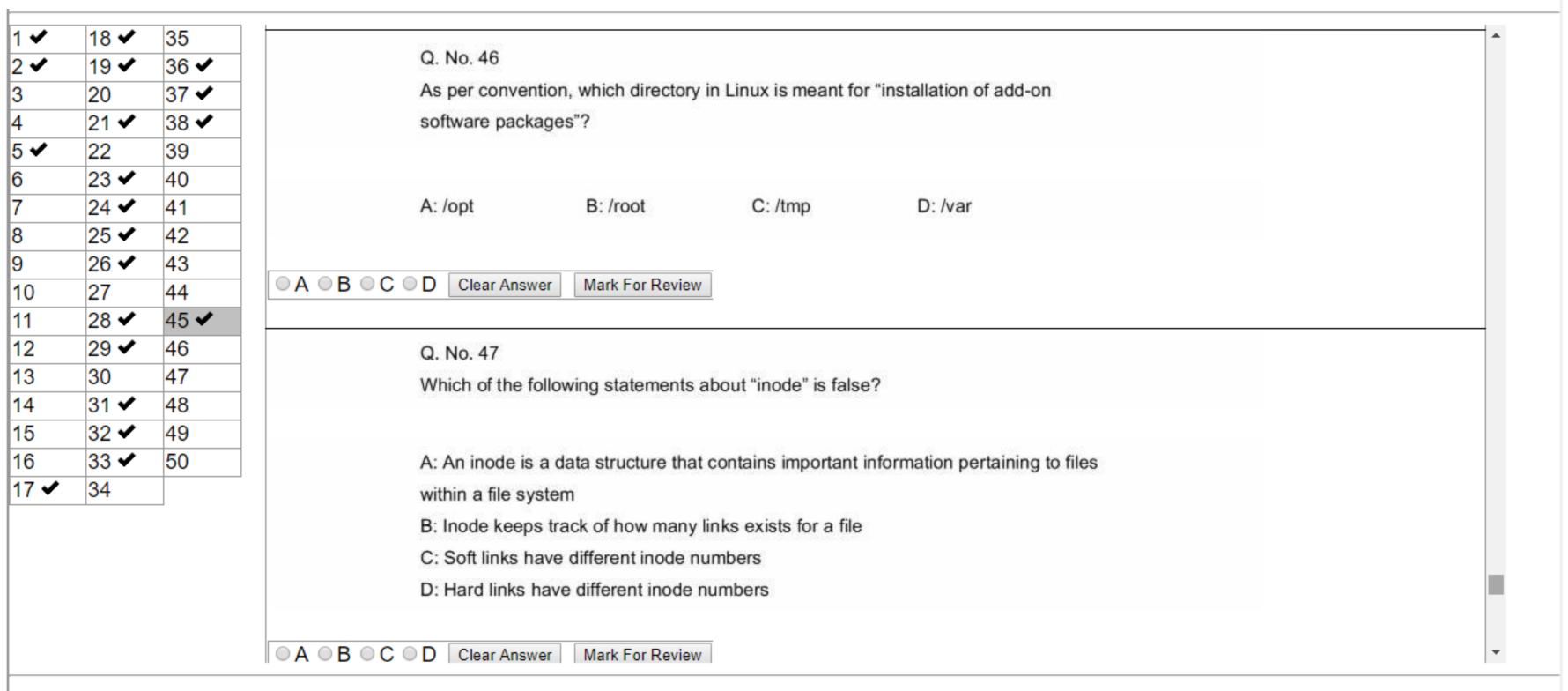


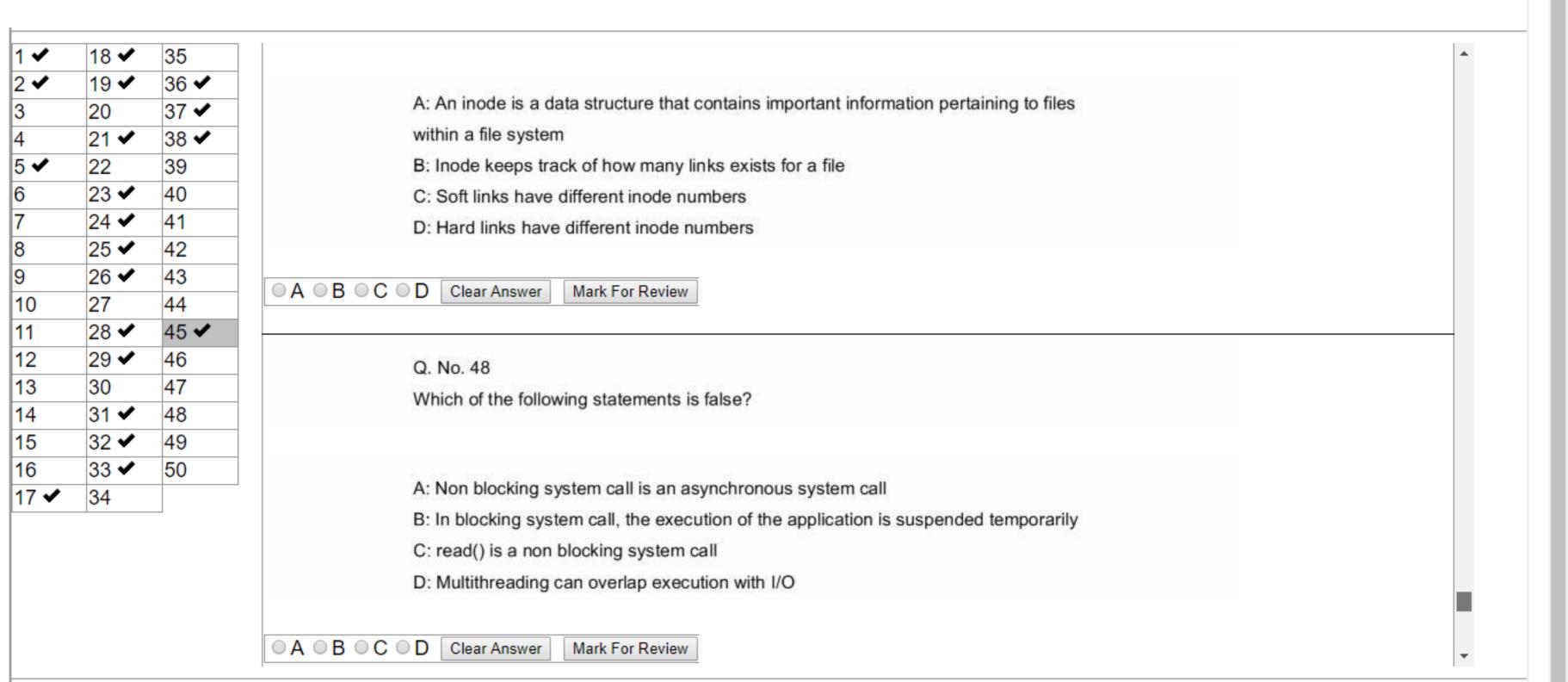


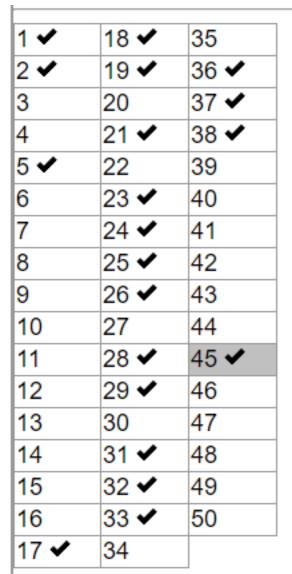




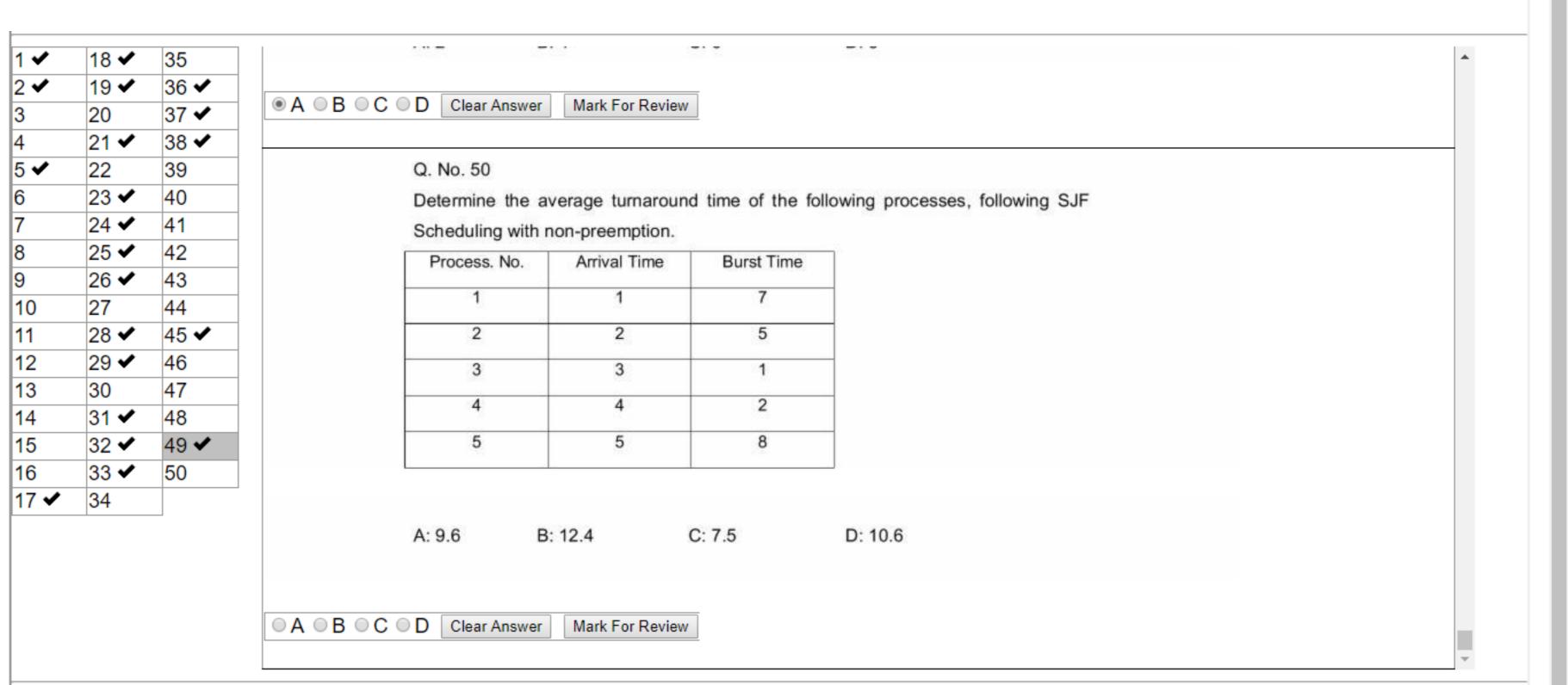








```
○ A ○ B ○ C ○ D Clear Answer
                                    Mark For Review
                 Q. No. 49
                 How many times will "Bye" be displayed if the following program is executed?
                 #include<stdio.h>
                 int main()
                     printf("Hello\n");
                     fork();
                      printf("World\n");
                     fork();
                     printf("Bye\n");
                     fork();
                A: 2
                               B: 4
                                                  C: 6
                                                                     D: 8
O A O B O C O D Clear Answer
                                    Mark For Review
```



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