

Control Flow

Q1 What will be the output of the program?

```
#include <stdio.h>
int main()
{
    int k,a=1,b=2;
    k=(a++==b)?2:3;
    printf("%d\n",k);
    return 0;
}
```

$a++ == b \Rightarrow F$
 $a = 1$
 $b = 2$

- A. 0
- B. 1
- C. 2
- D. 3

Answer: (C) ~~D~~

Q2 What will be the output of the program?

```
#include <stdio.h>
int main()
{
    int x=10, y=20;
    if(!(!x) && x)
        printf("%d",x);
    else
        printf("%d",y);
    return 0;
}
```

- A. 20
- B. 0
- C. 10
- D. 1

Answer: (C) ✓

Q3 What will be the output of the program?

```
#include<stdio.h>
int main()
{
    int m=5;
    if (m++>5) printf("%d\n",m);
    else printf("%d\n",m--);
}
```

Inequality evaluated first then the postfix operator

F

```
    return 0;
}
```

A. 4
B. 5
C. 6
D. 7

Answer: (B) ~~X~~ C

Q4 What will be the output of the program?

```
#include <stdio.h>
int main()
{
    int x=1,a=0,b=0;
    switch (x)
    {
        case 0: b++;
        case 1: a++;
        case 2: a++; b++;
    }
    printf("%d,%d\n",a,b);
    return 0;
}
```

A. 2,1
B. 1,1
C. 1,0
D. 2,2

no break so case
2 also executed

Answer: (C) ~~X~~ A

Q5 What will be the output of the program?

```
#include <stdio.h>
int main()
{
    int s=1,k=0;
    switch(s)
    {
        case 1: k+=1; break;
        case 2: k+=2; break;
        default: k+=3;
    }
    printf("%d\n",k);
    return 0;
}
```

A. 0

- B. 1
- C. 2
- D. 3

Answer: (B) ✓

Q6 What will be the output of the program?

```
#include <stdio.h>
int main()
{
    int s,i; start cond update
    for (s=0,i=0; i<3; i++,s+=i);
    printf("%d\n",s);
    return 0;
}
```

- A. 3
- B. 4
- C. 5
- D. 6

0, 1, 3, 3

Answer: (D) ✓

Q7

What will be the output of the program?

```
#include <stdio.h>
int main()
{
    int i=10,j=0;
    do { j=j+1; i--; } while (i>2);
    printf("%d",j);
    return 0;
}
```

- A. 10
- B. 9
- C. 8
- D. 7

j=1, i=9
j=8, i=2

Answer: (C) ✓

Q8 What will be the output of the program?

```

#include <stdio.h>
int main()
{
    int a,b;
    for (a=1,b=1; a<=100; a++)
    {
        if (b>=20) break;
        if (b%3==1) T
        {
            b+=3; 4, 7, 10, 13, 16, 19, 22
            continue;
        }
        b-=5;
    }
    printf("%d",a);
    return 0;
}

```

A. 7
B. 6
C. 8
D. 9

Answer: (C)

Q9 What will be the output of the program, after executing the input: 01<CR>?

```

#include <stdio.h>
int main()
{
    char k; int i;
    for (i=1; i<3; i++)
    {
        scanf("%c",&k);
        switch (k)
        {
            case '0': printf("another\n");
            case '1': printf("number\n");
        }
    }
    return 0;
}

```

A. another
number
another
B. another
number
number
C. another

1, 2
no break

number
D. number
number

Answer: (B) ✓

Q10 What will be the output of the program?

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

```
int main()
```

```
{
```

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

```
    for (i=0; i<2; i++)
```

```
    {
```

```
        x++; 1
```

```
        for (j=0; j<=3; j++)
```

```
        {
```

```
            if (j%3==1) continue;
```

```
            x++; 1 1 1
```

```
        }
```

```
        x++; 1
```

```
    }
```

```
    printf("%d",x);
```

```
    return 0;
```

```
}
```

A. 10

B. 11

C. 12

D. 13

Answer: (C) ✗
A

i=0 j=0
j=1
j=2

x 2

x