### **DSA Supreme**

### Week -2 Quiz

### Question 1

Which type is best suited to represent the logical values?





Correct Answers: B

Your Answers: B

### Question 2

Decision Control statements in C++ can be implemented using

- A if
- B if-else
- c conditional-operator
- D all of above



# #include <iostream> using namespace std; int main() { if (0) { cout << "Hello"; } else { cout << "Good Bye"; } return 0; } A Hello B Good Bye C HelloGood bye D Compilation error

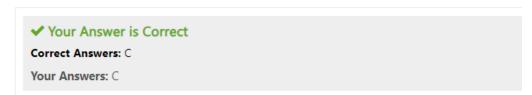
Question 4

✓ Your Answer is Correct

Correct Answers: B
Your Answers: B

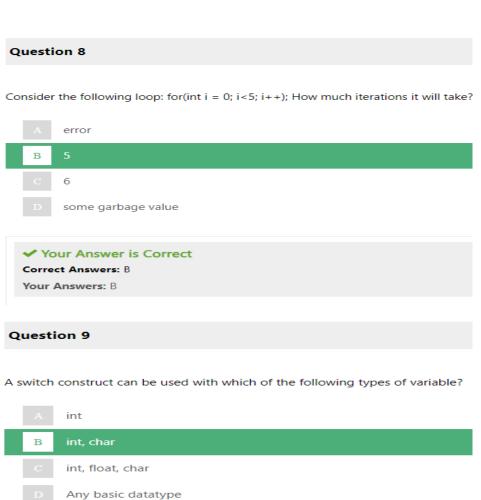
if you have to make decision based on multiple choices, which of the following is best suited?

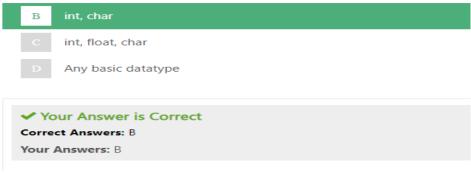




### Question 5 In situations where we need to execute body of the loop before testing the condition, we should use\_ for loop while loop nested for loop ✓ Your Answer is Correct Correct Answers: C Your Answers: C Question 6 which loop is faster in C++ Language, for, while or do-while? for loop while loop do-while loop ✓ Your Answer is Correct Correct Answers: D Your Answers: D Question 7 What is the way to suddenly come out of or quit any loop in C++? continue; leave; exit(0); ✓ Your Answer is Correct Correct Answers: B

Your Answers: B





The destination statement for the goto label is identified by what label?





```
What will be the output of following code?
                                              #include <iostream>
                                              using namespace std;
                                              int main() {
                                              int a = 10;
                                              if (a = 15)
Question 11
                                              time;
                                              cout << a;
What will be the output of following code?
#include <iostream>
                                              if (n == 3)
using namespace std;
int main() {
                                              goto time;
int n;
                                              }
for (n = 5; n > 0; n--)
                                              break;
cout << n;
if (n == 3)
break;
                                              return 0;
return 0;
                                              }
          543
                                                        1010
                                                        10
          5432
                                                        infinitely print 10
          53
                                                        compile time error

✓ Your Answer is Correct

✓ Your Answer is Correct

  Correct Answers: A
                                                 Correct Answers: D
   Your Answers: A
                                                 Your Answers: D
```

```
What will be the output of the following C++ code?
 #include <iostream>
 using namespace std;
 int main() {
 int n = 15;
 for (; ;)
 cout << n;
 return 0;
           error
           15
           infinitely printing n
           none of the mentioned

✓ Your Answer is Correct

    Correct Answers: C
    Your Answers: C
Question 14
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
int main() {
int i ;
for (i = 0; i < 10; i++);
{
cout << i;
return 0;
}
          123456789
```



12345678910

compile time error

Your Answers: B

```
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
int main() {
int a, b, c;
a = 2;
b = 7;
c = (a > b) ? a : b;
cout << "c: " << c;
return 0;
    A 2
          9
         14

✓ Your Answer is Correct

   Correct Answers: B
   Your Answers: B
 Question 16
What will be the output of the following C++ code?
#include <iostream>
using namespace std; int main() {
```

What will be the output of the following C++ code? #include <iostream>
using namespace std;
int main() {

int a = 0;
int b = 10;
a = 2;
b = 7;
if (a && b) {

cout << "true: " << endl;
}
else
{

cout << "false: " << endl;
}
return 0;
}



```
✓ Your Answer is Correct
Correct Answers: A
Your Answers: A
```

### What is the name of | operator? A sizeof B or C and D modulus Your Answer is Correct Correct Answers: B Your Answers: B

### Question 18

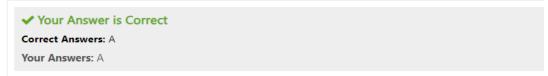
Question 17

```
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
int main() {

int a = 5, b = 6, c, d;
c = a, b;
d = (a,b);
cout << c << " " << d;

return 0;
}
```





It is a separator here. In C, the value a is stored in c and in d the value b is stored in d because of the bracket.

Question 19 single Correct Option,

```
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
int main() {
int i, j;
i = (j++, j + 100, 999 + j);
cout << i;
return 0;
}
          1000
          1001

✓ Your Answer is Correct

   Correct Answers: C
   Your Answers: C
 j starts with the value 10. j is then incremented to 11. Next, j is added to 100. Finally, j (still containing 11) is added to 999 which yields the result 1010.
```

### Question 20

```
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
int main() {
int x, y;
x = 5;
y = ++x * ++x;
cout << x << y;
y = x++*++x;
cout << x << y;
return 0;
```



```
✓ Your Answer is Correct

Correct Answers: A
```

Your Answers: A

```
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
int main() {
double a = 21.09399;
float b = 10.20;
int c, d;
c = (int) a;
d = (int) b;
cout << c << " " << d;
return 0;
          20 10
          10 21
          10 20

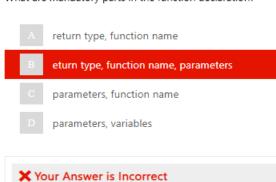
✓ Your Answer is Correct

   Correct Answers: C
   Your Answers: C
Question 22
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
int main() {
int a = 20, b = 10, c = 15, d = 5;
int e;
e = a + b * c / d;
cout << e << endl;
return 0;
          50
          60
          70
          90

✓ Your Answer is Correct

   Correct Answers: A
   Your Answers: A
```

## Question 23 Where does the execution of the program starts? A fun() B main() C void() D else function Your Answer is Correct Correct Answers: B Your Answers: B Question 24 What are mandatory parts in the function declaration?



Correct Answers: A Your Answers: B





In the call by reference, it will just passes the reference of the memory addresses of passed values rather than copying the value to new memories which reduces the overall time and memory use

```
What will be the output of the following C++ code?
#include <iostream>
using namespace std;
void car{
cout << "Audi R8";
}
int main() {
car();

return 0;
}

A Audi R8

B Audi R8Audi R8

C compile time error

D runtime error
```

### X Your Answer is Incorrect

Correct Answers: C

Your Answers: A

Expected braces like car()

### Question 27

What will be the output of the following C++ code?
#include <iostream>
using namespace std;
void fun(int x, int y){
x = 20;
y = 10;
}
int main() {
int x = 10;
fun (x, x);
cout << x;

return 0;
}



### ✓ Your Answer is Correct

Correct Answers: A
Your Answers: A

In this program, we called by value so the value will not be changed, So the output is 10

Question 28 Single Correct Option, +1.00, -0.00

What will be the output of the following C++ code?

#include <iostream>
using namespace std;
int fun(int x = 0, int y = 0, int z){
return (x + y + z);
}
int main() {

cout << fun(10);

return 0;
}

A 10
B 0
C error
D Garbage value

Question 29 Single Correct Option, +1.00, -0.00

Default arguments should always be declared at the rightmost side of the parameter list but the above function has a normal variable at the rightmost side which is a syntax error, therefore the function gives an error.

Д

What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int fun(int = 0, int = 0);

int main() {

cout << fun(5);

return 0;

int fun(int x, int y){

return (x + y);

}

Α -

В

10

D 5

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Explanation: C++ allows to define such prototype of the function in which you are not required to give variable names only the default values. While in function definition you can provide the variable names corresponding to each parameter.

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

How many minimum bits are needed to represent the decimal number 15 in binary form? ✓ Your Answer is Correct Correct Answers: B Your Answers: B Question 30 Question 33 What is the decimal equivalent of the binary number 1001? What is the decimal equivalent of the binary number 1111? 8 10 16 ✓ Your Answer is Correct ✓ Your Answer is Correct Correct Answers: B Correct Answers: C Your Answers: B Your Answers: C Question 34 Question 31 How many bits are required to represent INT in C++? What is the binary equivalent of the decimal number 13? 1100 16 1011 100 1110

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

### What will be the output of the following C code? What will be the output of the following C code? #include <stdio.h> void main() void main() { int a = 5, b = -7, c = 0, d; int a = -5; d = ++a && ++b || ++c; int k = (a++, ++a);printf("\n%d%d%d%d", a, b, c, d); printf("%d\n", k); 6 -6 0 0 6 -5 0 1 -5 6666 ✓ Your Answer is Correct ✓ Your Answer is Correct Correct Answers: D Correct Answers: A Your Answers: D Your Answers: A Question 38 Question 37 #include <stdio.h> #include <stdio.h> int main() int main() int x = -2; if (~0 == 1) if (!0 == 1) printf("yes\n"); printf("yes\n"); else else printf("no\n"); printf("no\n"); yes no error error undefined undefined ✓ Your Answer is Correct ✓ Your Answer is Correct Correct Answers: B Correct Answers: A

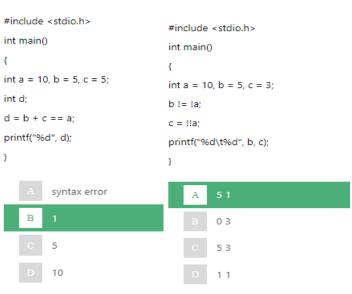
Your Answers: A

Question 36

Question 35

Your Answers: B

### Question 40 Question 39 #include <stdio.h> #include <stdio.h> int main() int main() int y = 1; if (y & (y = 2)) printf("true %d\n", y); { int y = 0; else if (1 | (y = 1))printf("false %d\n", y); printf("y is %d\n", y); else printf("%d\n", y); true 2 false 2 either true 2 or false 2 true 1 error undefined X Your Answer is Incorrect Correct Answers: C ✓ Your Answer is Correct Your Answers: B Correct Answers: A Your Answers: A It's either true or false, depending on the compiler. Question 41 Question 42





```
#include <stdio.h>

void main()
{

float x = 0.1;

if (x == 0.1)

printf("A");
else

printf("B");
}

A A

B B

C AB

D error

Your Answer is Correct

Correct Answers: B

Your Answers: B

Reference:

https://learn.microsoft.com/en-us/cpp/build/why-floating-point-numbers-may-lose-precision?view=msvc-170
```

### Question 44



Correct Answers: B
Your Answers: C

✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

### **Question 47**

```
#include <stdio.h>
#include <stdio.h>
int main()
                                       void main()
                                       {
{
unsigned int a = 10;
                                       int x = 97;
                                       int y = sizeof(x++);
a = ~a;
                                       printf("x is %d", x);
printf("%d\n", a);
                                       }
}
                                                 x is 98
          -10
                                                 x is 99
         -11
                                                 runtime error
```



Correct Answers: C

Your Answers: D

### ✓ Your Answer is Correct

Correct Answers: A

Your Answers: A

Question 46 Single Correct Option, + 1.00, -0.00

```
int main()
int a=3;
switch(a)
case 0: printf("0 ");
case 3: printf("3 ");
case 5: printf("5 ");
default: printf("RABBIT ");
a=10;
switch(a)
{
    case 0: printf("0 ");
    case 3: printf("3 ");
    case 5: printf("5 ");
    default: printf("RABBIT "); break;
return 0;
                 5 RABBIT
                 0 3 5 RABBIT 0 3 5 RABBIT
                  0 3 5 RABBIT RABBIT
```

3 5 RABBIT RABBIT

✓ Your Answer is Correct

Correct Answers: D

Your Answers: D

Explanation:
Absence of break; after case statement causes control to go to next case automatically. So after matching 3 with a==3, program prints 3 and control falls down the ladder without checking case again printing everything below it. So Switch checks only once and falls down.

### Question 49

```
int main()
{
int a=3;
switch(a)
{
case 2: printf("ZERO "); break;
case default: printf("RABBIT ");
}
          RABBIT
          ZERO RABBIT
          No output
    D
```

```
✓ Your Answer is Correct
```

Notice that it is "default" not "case default".

# Question 50 int main() { int a=3; switch(a) { } printf("MySwitch"); } A MySwitch B no output C compile time error D none of the mentioned ✓ Your Answer is Correct Correct Answers: A Your Answers: A

Question 51 Single Correct O<sub>1</sub>

```
{
int a;

switch(a)
{
 printf("APACHE ");
}

printf("HEROHONDA");
}
```

int main()

A APACHE HEROHONDA

B HEROHONDA

compile time error

none of the mentioned

✓ Your Answer is Correct

Correct Answers: B

Your Answers: B

Notice the missing CASE or DEFAULT statements. Still compiler accepts. But without CASE statement nothing will be printed inside of SWITCH.

```
int main()
{
  int a;

switch(a);
{
  printf("DEER ");
}

printf("LION");
}

A LION

B DEER LION

C compile time error

D none of the mentioned
```

### X Your Answer is Incorrect

Correct Answers: B

Your Answers: A

Notice a semicolon at the end of switch(a);. So, printf DEER is out of SWITCH.

### Question 53

```
int main()
{
char code='A';

switch(code)
{
case 64+1: printf("ANT ");break;
case 8*8+4: printf("KING "); break;
default: printf("NOKING");
}

printf("PALACE");
}

A ANT KING PALACE

B KING PALACE

C ANT PALACE

D ERROR
```



Correct Answers: C

Your Answers: C

ASCII value of 'A' is 65. So (64+1) matches A. Also expression leading to Integers can be used as CASE Constants.

Question 54 Single Correct Option, +1.00, -0.00

```
int main()
int k=8;
switch(k)
case 1==8: printf("ROSE ");break;
case 1 && 2: printf("JASMINE "); break;
default: printf("FLOWER ");
printf("GARDEN");
   A ROSE GARDEN
         JASMINE GARDEN
        none of the mentioned

✓ Your Answer is Correct
```

Correct Answers: C Your Answers: C

(1==8) is false i.e 0. (1&&2) is true AND true i.e true i.e 1. So case allowed first ZERO 0 and then ONE 1. All integer constants are allowed for SWITCH Case Constants.

### Question 55

```
int main()
switch(24.5)
case 24.5: printf("SILVER ");break;
case 25.0: printf("GOLD "); break;
default: printf("TIN ");
printf("COPPER");
}
         SILVER COPPER
         TIN COPPER
         COPPER

✓ Your Answer is Correct

  Correct Answers: D
```

You can not use float, double or Strings inside Switch or Switch CASE.