

1st February 2023

Q1. Is C a high level, middle level or low-level language? Explain.

Ans1.

High level language

It is a programmer friendly language & is easy to understand. It is widely used for programming.

Ex → C#, Javascript etc.

Low level language

It is machine friendly language & is very tough to understand. It is not commonly used now-a-days in programming.

Middle level language

Middle level language has features of both

high level language & middle level language.

Ex → C++, C etc.

Note → Example of low level language can be machine code and assembly language i.e these are the 2 types of low level language.

Q2. What are reserved keywords in C++?

Reserved keywords

Reserved keywords can not be used as an identifier. Some examples of reserved keywords are break, double, else, sizeof, signed, for etc.

asm	double	new	switch
auto	else	operator	template
break	enum	private	this
case	extern	protected	throw
catch	float	public	try
char	for	register	typedef
class	friend	return	union
const	goto	short	unsigned
continue	if	signed	virtual
default	inline	sizeof	void
delete	int	static	volatile
do	long	struct	while

Q3. As we know that short takes 2 bytes of memory which is equivalent to 16 bits and the maximum number it can store is $2^{16} - 1$ which is equal to 65535 but what happens if we add 65535 and it becomes 65545 and then stored in short? What will be the output?

```

1  #include<iostream>
2  using namespace std;
3  int main(){
4      unsigned short a = 65535;
5      unsigned short ans = a+10; // the cycle will be repeated from 0 again.
6      cout<<ans;
7      return 0;
8  }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```

PS C:\Users\BHAVYA\OneDrive\Desktop\Asus Web Dev\razorpayClone> cd "c:\Users\BHAVYA\
{ g++ prac.cpp -o prac } ; if ($?) { .\prac }
9
```

Q4. Explore ternary operator in C++.

Ternary operator

It is also known as conditional operator & the working is similar to that of if-else statement however this operator takes less space & helps to write if-else statements in shortest way possible.

```
int a = 5;
```

```
if (a > 3) {
```

```
    cout << "Hi";
```

```
}
```

```
else {
```

```
    cout << "Hey";
```

```
}
```

$(a > 3) ? \text{cout} << \text{"Hi"}$

Ternary
operator

$: \text{cout} << \text{"Hey"};$

```
1  #include<iostream>
2  using namespace std;
3  int main(){
4      int a = 5;
5      (a>3)?cout<<"Hi" : cout<<"Hey";
6      return 0;
7  }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\BHAVYA\OneDrive\Desktop\Asus Web
{ g++ prac.cpp -o prac } ; if ($?) { .\prac
Hi
```