



# Coding Age

## Practise set (Variables & Data type)

### Mcqs:-

1. Which of the following is true for variable names in C?
  - A. Variable names cannot start with a digit
  - B. Variable can be of any length
  - C. They can contain alphanumeric characters as well as special characters
  - D. Reserved Word can be used as variable name
2. Which of the following cannot be a variable name in C?
  - A. TRUE
  - B. friend
  - C. export
  - D. volatile
3. What is the output of this program?

```
void main()
{
int x = 10;
float x = 10;
printf("%d", x)
}
```

- A. Compilations Error
  - B. 10
  - C. 10
  - D. 10.1
4. What is the output of this program?

```
#include <stdio.h>

int main()
{
```



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```
int i;  
for (i = 0; i < 5; i++)  
int a = i;  
printf("%d", a);  
}
```

- A. Syntax error in declaration of a
- B. No errors, program will show the output 5
- C. Redclaration of a in same scope throws error
- D. a is out of scope when printf is called

5. What is the output of this program?

```
#include <stdio.h>  
  
int var = 20;  
  
int main()  
{  
    int var = var;  
    printf("%d ", var);  
    return 0;  
}
```

- A. Garbage Value
- B. 20
- C. Compiler Error
- D. None of these

6. Which is false?

- A. Constant variables need not be defined as they are declared and can be defined later
- B. Global constant variables are initialized to zero
- C. const keyword is used to define constant values
- D. You cannot reassign a value to a constant variable



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7. Array is \_\_\_\_\_ datatype in C Programming language.

- A. Derived Data type
- B. Primitive Data type
- C. Custom Data type
- D. None of these

8. Which of the following is not a logical operator?

- A. !
- B. &&
- C. ||
- D. |

9. Which of the following is not a valid declaration in C?

- 1. short int x; ^ ^ ^ ^
- 2. signed short x;
- 3. short x;
- 4. unsigned short x;

- A. 1 and 2
- B. 2 and 4
- C. 3 and 4
- D. All are valid

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

- A. %, \*, /, +, -
- B. %, +, /, \*, -
- C. %, +, -, \*, /
- D. +, -, %, \*, /

11. What is the output of this program?

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

```
int main(){
```

```
    printf("%d ", sizeof(2.5));
```



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```
printf("%d",sizeof(2));  
printf("%d",sizeof('A'));  
return 0;  
}
```

A. 8 4 2

B. 4 4 1

C. 8 4 1

D. 4 4 2

12.What is the output of this program?

```
void main()  
{  
    int a, b = 5, c;  
    a = 5 * (b++);  
    c = 5 * (++b);  
    printf("%d %d",a,c);  
}
```

A. 30 35

B. 30 30

C. 25 30

D. 25 35

13.What is the output of this program?

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



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```
void main()
{
    int a=1, b=2, c=3, d;
    d = (a=c, b+=a, c=a+b+c);
    printf("%d %d %d %d", d, a, b, c);
}
```

- A. 11 3 5 11
- B. 11 1 5 11
- C. 11 3 2 11
- D. 11 3 3 11

**Answer the following:-**

14.What would be the output of the following programs:

```
#include <stdio.h>
int main()
{
    int x = 3.9;
    printf("%d\n",x);

    return 0;
}
```

15.What would be the output of the following programs:

```
#include <stdio.h>
int main()
{
    char x = 'A';
    printf("%d\n",x);
    return 0;
}
```



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16.What would be the output of the following programs:

```
#include <stdio.h>
int main()
{
    char x = 'A';
    printf("%d\n",x+15);
    return 0;
}
```

17.What would be the output of the following programs:

```
#include <stdio.h>
int main()
{
    printf("%c\n",80);
    return 0;
}
```

## Write the programs for the following questions:-

- 1.Write a C program to take an int, a float and a char input from the user and print them on the screen.
- 2.Take the values of length and breath of a rectangle from the user and print the area of it on the screen.
- 3.Take a char input from the user and print its ASCII value.
- 4.Write a C program to take two integer inputs from the user and print the sum and the product of them.
- 5.Write a program to print the square of a number. e.g.-

INPUT : 2      OUTPUT : 4

INPUT : 5      OUTPUT : 25

- 6.Write a program that converts Centigrade to Fahrenheit.

Expected Output :

Input a temperature (in Centigrade): 45

113.000000 degrees Fahrenheit



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7. Write a C program that calculates the volume of a sphere.

Expected Output :

Input the radius of the sphere : 2.56

The volume of sphere is 70.276237.

8. Write a C program that converts kilometers per hour to miles per hour.

Expected Output :

Input kilometers per hour: 15

9.320568 miles per hour

9. Write a C program that takes hours and minutes as input, and calculates the total number of minutes

Expected Output :

Input hours: 5

Input minutes: 37

Total: 337 minutes.

10. Write a program in C that takes minutes as input, and display the total number of hours and minutes

Expected Output :

Input minutes: 546

9 Hours, 6 Minutes

11. Write a program in C that reads a forename, surname and year of birth and displays the names and the year one after another sequentially.

Expected Output :

Input your firstname: Tom

Input your lastname: Davis

Input your year of birth: 1982

Tom Davis 1982

12. Write a C program to find the third angle of a triangle if two angles are given.

Expected Output :

Input two angles of triangle separated by comma : 50,70

Third angle of the triangle : 60



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