**Character Class Testing and Conversation:**

**Writer:** Sayak Haldar

**1) Which of the following library function is not case-sensitive?**

a)toupper()

b)tolower()

c)isdigit()

d)All of the mentioned

Answer is c) isdigit

**2)The following expression can be substituted for: if (isalpha(c) && isdigit(c))**

a)if (isalnum(c))

b)if (isalphanum(c))

c)if (isalphanumeric(c))

d)None of the mentioned.

**Answer is d) None of the mentioned**

Explanation: if (isalpha(c) && isdigit(c)) will always return zero value

The replacement for if (isalnum(c)) is if (isalpha(c)||isdigit(c))

**3)Which of the following will return a non-zero value when checked with isspace(c)?**

a)blank

b)newline

c)return

d)All of the mentioned

**Answer) b) newline.**

**Explanation:**

|  |  |
| --- | --- |
| Characters | Meaning |
|  |  |
| ' ' | Space |
|  |  |
| '\n' | Newline or Newfeed |
|  |  |
| '\t' | Horizontal tab |
|  |  |
| '\v' | Vertical tab |
|  |  |
| '\f' | Feed |
|  |  |
| '\r' | Return Carriage |
|  |  |

These are the space characters.

**4)What is the output of this C code?**

1.#include <stdio.h>

2.#include <ctype.h>

3.int main()

4.{

5. char i = 9;

6. if (isdigit(i))

7. printf("digit\n");

8. else

9. printf("not digit\n");

10. return 0;

11.}

a)digit

b)not digit

c)Depends on the compiler

d)None of the mentioned

**Answer is b) not digit**

Explanation: The character corresponding to ASCII value 9 is not a digit

**5)What is the output of this C code?**

1.#include <stdio.h>

2.#include <ctype.h>

3.int main()

4.{

5. int i = 9;

6. if (isdigit(i))

7. printf("digit\n");

8. else

9. printf("not digit\n");

10. return 0;

11.}

a)digit

b)not digit

c)Depends on the compiler

d)None of the mentioned

**Answer is b)** not digit

**6.What is the output of this C code?**

1.#include <stdio.h>

2.int main()

3.{

4. char i = '9';

5. if (isdigit(i))

6. printf("digit\n");

7. else

8. printf("not digit\n");

9. return 0;

10.}

a)digit

b)not digit

c)Depends on the compiler

d)None of the mentioned

Answer is a) digit

**7.What is the output of this C code?**

1.#include <stdio.h>

2.#include <ctype.h>

3.int main()

4.{

5. if (isspace('n'))

6. printf("space\n");

1. else
2. printf("not space\n");
3. return 0;

10.}

a)Compile time error

b)space

c)not space

d)None of the mentioned

Answer) c) not space

**Answer is c) not space**

Explanation: '\n' is a space character, but 'n'

**8.What is the output of this C code?**

1.#include <stdio.h>

2.#include <ctype.h>

3.int main()

4.{

5. int i = 0;

6. if (isspace(i))

7. printf("space\n");

8. else

9. printf("not space\n");

10. return 0;

11.}

a)Compile time error

b)space

c)not space

d)None of the mentioned

**8) Answer is c) not space**

Explanation: The character corresponding to ASCII value 0 ('\0') is not a space character

**9.Which is true about isaplpha(c), where c is an int that can be represented as an unsigned char or EOF. Isalpaha returns**

a)Non-zero if c is alphabetic

b)0 if c is not alphabetic

c)Both a & b

d)None of the mentioned

**Answer is c) Both a & b**

**10.Which is true about isupper(c), where c is an int that can be represented as an unsigned char or EOF. isupper(c) returns?**

a)Non-zero if c is upper case

b)0 if c is not upper case

c)Nothing

d)Both a & b

**Answer is d) Both a & b**

**11.Which is true about isalnum(c), where c is an int that can be represented as an unsigned char or EOF. isalnum(c) returns?**

a)Non-zero if isalpha(c) or isdigit(c)

b)0 if not isalpha(c) or not isdigit(c)

c)Both a & b

d)None of the mentioned

**Answer is a) Non-zero if isalpha(c) or isdigit(c)**

Explanation: isalnum(c) returns : Non-zero if isalpha(c) or isdigit(c)

**12.What is the output of this C code?**

1.#include <stdio.h>

2.#include <ctype.h>

3.int main()

4.{

5. char c = 't';

6. printf("%d\n", isspace(c));

7. return 0;

8.}

a)Non-zero number

b)0

c)Error

d)t

**Answer is b) 0**

**13.What is the output of this C code?**

1.#include <stdio.h>

2.#include <ctype.h>

3.int main()

4.{

5. char c = '\t';

6. printf("%d\n", isspace(c));

7. return 0;

8.}

a) Non-zero number

b)Nothing

c)Error

d)t

**Answer is a) Non-zero number**

**14.What is the output of this C code?**

1.#include <stdio.h>

2.#include <ctype.h>

3.int main()

4.{

5. char c = 't';

6. printf("is :%c\n", tolower('A'));

7. return 0;

8.}

a)A

b)a

c)Non-zero number

d)Zero

**Answer is b) 'a'**

**15. Which types of input are accepted in toupper(c)?**

a)char

b)char \*

c)float

d)Both (a) and (b)

**Answer is a) char**

**16.What is the difference in the ASCII value of capital and non-capital of the same letter is?**

a)1

b)16

c)32

d)Depends with compiler

**Answer is c) 32**

Explanation: 'A' has ASCII value as 65 and 'a' has ASCII value as 97