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TECHNOLOGY
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1. Write a program to print the numbers from 1 to 100 , but by replacing the multiples of 3 with “Fizz” and the multiples of 5 with “Buzz”.

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

```
int main() {  
    int i;  
    for (i = 1; i <= 100; i++) {  
        if (i % 3 == 0 && i % 5 == 0) {  
            printf("FizzBuzz\n");  
        } else if (i % 3 == 0) {  
            printf("Fizz\n");  
        } else if (i % 5 == 0) {  
            printf("Buzz\n");  
        } else {  
            printf("%d\n", i);  
        }  
    }  
}
```

```
    }  
}  
return 0;  
}
```

- 2. Write a program that takes a number as input and checks whether the number is positive,negative or zero.**

```
#include <stdio.h>  
  
int main() {  
    int num;  
  
    printf("Enter a number: ");  
    scanf("%d", &num);  
  
    if (num > 0) {  
        printf("%d is positive.\n", num);  
    } else if (num < 0) {  
        printf("%d is negative.\n", num);  
    } else {  
        printf("The number is zero.\n");  
    }  
  
    return 0;  
}
```

- 3. Write a program that takes a number as input and prints the sum of its digits using a do -while loop.**

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

```
int main() {
```

```
    int num, sum = 0, digit;
```

```
    printf("Enter a number: ");
```

```
    scanf("%d", &num);
```

```
    do {
```

```
        digit = num % 10;
```

```
        sum += digit;
```

```
        num /= 10;
```

```
    } while (num != 0);
```

```
    printf("The sum of the digits is %d\n", sum);
```

```
    return 0;
```

```
}
```

- 4. Write a c program to enter two numbers and perform all algorithmic operations using switch case.**

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

```
int main() {
```

```
    int num1, num2, choice;
```

```
    printf("Enter two numbers: ");
```

```
    scanf("%d %d", &num1, &num2);
```

```
printf("Choose an operation to perform:\n");
printf("1. Addition (+)\n");
printf("2. Subtraction (-)\n");
printf("3. Multiplication (*)\n");
printf("4. Division (/)\n");
scanf("%d", &choice);
```

```
switch (choice) {
    case 1:
        printf("%d + %d = %d\n", num1, num2, num1 +
num2);
        break;
    case 2:
        printf("%d - %d = %d\n", num1, num2, num1 -
num2);
        break;
    case 3:
        printf("%d * %d = %d\n", num1, num2, num1 *
num2);
        break;
    case 4:
        if (num2 == 0) {
            printf("Cannot divide by zero.\n");
        } else {
            printf("%d / %d = %d\n", num1, num2, num1 /
num2);
        }
        break;
    default:
```

```
        printf("Invalid choice.\n");
        break;
    }

    return 0;
}
```

5. Write a c program to enter the radius of a circle and find its diameter, circumference and area.

```
#include <stdio.h>

#define PI 3.14159

int main() {
    float radius, diameter, circumference, area;

    printf("Enter the radius of the circle: ");
    scanf("%f", &radius);

    diameter = 2 * radius;
    circumference = 2 * PI * radius;
    area = PI * radius * radius;

    printf("Diameter = %.2f units\n", diameter);
    printf("Circumference = %.2f units\n", circumference);
    printf("Area = %.2f sq. units\n", area);

    return 0;
}
```

