

1.

```
#include <stdio.h>
int main()
{
    int n, m, rem;
    printf("Enter the value of N: ");
    scanf(" %d ", &n);
    printf("Enter the value of M: ");
    scanf(" %d ", &m);
    rem = n % m;
    if (rem == 0)
    {
        printf("N is an exact multiple of M");
    }
    else
    {
        printf("N is not an exact multiple of M");
    }
    return 0;
}
```

2.

```
#include <stdio.h>
int main()
{
    int n, i, count = 0;
    printf("Enter the number of elements: ");
    scanf(" %d ", &n);
    int a[n];
    printf("Enter the elements: ");
    for (i = 0; i < n; i++)
    {
        scanf(" %d ", &a[i]);
    }
    for (i = 0; i < n; i++)
    {
        if (a[i] % 2 == 0)
        {
            count++;
        }
    }
    printf("The number of even numbers are: %d ", count);
    return 0;
}
```

3.

```
#include <stdio.h>
int main()
{
    int n, i, count = 0;
    printf("Enter the number of elements: ");
    scanf(" %d ", &n);
    int a[n];
    printf("Enter the elements: ");
```

```

for (i = 0; i < n; i++)
{
    scanf(" %d ", &a[i]);
}
for (i = 0; i < n; i++)
{
    if (a[i] % 2 != 0)
    {
        count++;
    }
}
printf("The number of odd numbers are: %d ", count);
return 0;
}

```

4.

```

#include <stdio.h>
int main()
{
    int n, i, count1 = 0, count2 = 0;
    printf("Enter the number of elements: ");
    scanf(" %d ", &n);
    int a[n];
    printf("Enter the elements: ");
    for (i = 0; i < n; i++)
    {
        scanf(" %d ", &a[i]);
    }
    for (i = 0; i < n; i++)
    {
        if (a[i] % 2 == 0)
        {
            count1++;
        }
        else
        {
            count2++;
        }
    }
    printf("The number of even numbers are: %d ", count1);
    printf("The number of odd numbers are: %d ", count2);
    return 0;
}

```