

<pre>1 #include <stdio.h> 2 3 int main() 4 { 5 int num, rev = 0; 6 7 printf("Enter an integer: "); 8 scanf("%d", &num); 9 10 for (int i = num; i > 0; i /= 10) 11 { 12 int digit = i % 10; 13 rev = (rev * 10) + digit; 14 } 15 16 printf("The reverse of the integer is: %d\n", rev); 17 18 return 0; 19 }</pre>	<pre>/tmp/306v70nwK0.o Enter an integer: 12345 The reverse of the integer is: 54321</pre>
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<pre>1 #include <stdio.h> 2 3 int main() 4 { 5 int num, sum = 0, digit; 6 7 printf("Enter an integer: "); 8 scanf("%d", &num); 9 10 for (int i = num; i > 0; i /= 10) 11 { 12 digit = i % 10; 13 sum += digit; 14 } 15 16 printf("The sum of digits in the integer is: %d\n", 17 sum); 18 19 return 0; 20 }</pre>	<pre>/tmp/306v70nwK0.o Enter an integer: 12345 The sum of digits in the integer is: 15 </pre>
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```
1 #include <stdio.h>
2 #include <math.h>
3
4 int main()
5 {
6     int num, count;
7
8     printf("Enter an integer: ");
9     scanf("%d", &num);
10
11     count = floor(log10(abs(num))) + 1;
12
13     printf("The number of digits in the integer is:
14           %d\n", count);
15
16     return 0;
17 }
```

/tmp/306v70nwK0.o
Enter an integer: 123456
The number of digits in the integer is: 6

```
1 #include <stdio.h>
2 int main()
3 {
4     int amount, notes_500, notes_100, notes_50, notes_20, notes_10, notes_5,
5       notes_2, notes_1;
6     printf("Enter the amount: ");
7     scanf("%d", &amount);
8     notes_500 = amount / 500;
9     amount %= 500;
10    notes_100 = amount / 100;
11    amount %= 100;
12    notes_50 = amount / 50;
13    amount %= 50;
14    notes_20 = amount / 20;
15    amount %= 20;
16    notes_10 = amount / 10;
17    amount %= 10;
18    notes_5 = amount / 5;
19    amount %= 5;
20    notes_2 = amount / 2;
21    amount %= 2;
22    notes_1 = amount;
23    printf("Minimum number of notes required:\n");
24    printf("Rs. 500: %d\n", notes_500);
25    printf("Rs. 100: %d\n", notes_100);
26    printf("Rs. 50: %d\n", notes_50);
27    printf("Rs. 20: %d\n", notes_20);
28    printf("Rs. 10: %d\n", notes_10);
29    printf("Rs. 5: %d\n", notes_5);
30    printf("Rs. 2: %d\n", notes_2);
31    printf("Rs. 1: %d\n", notes_1);
32 }
```

/tmp/306v70nwK0.o
Enter the amount: 575
Minimum number of notes required:
Rs. 500: 1
Rs. 100: 0
Rs. 50: 1
Rs. 20: 1
Rs. 10: 0
Rs. 5: 1
Rs. 2: 0
Rs. 1: 0

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

```
int main()
```

```
{  
    char ch;
```

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

```
    scanf("%c", &ch);
```

```
    if (ch >= 'a' && ch <= 'z')
```

```
    {  
        printf("%c is a lowercase alphabet.\n", ch);
```

```
    }  
    else if (ch >= 'A' && ch <= 'Z')
```

```
    {  
        printf("%c is an uppercase alphabet.\n", ch);
```

```
    }  
    else
```

```
    {  
        printf("%c is not an alphabet.\n", ch);
```

```
    }  
  
    return 0;  
}
```

/tmp/306v70nwK0.o

Enter a character: C

C is an uppercase alphabet.

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

```
#include <string.h>
```

```
int main()
```

```
{  
    char str[100];  
    int i, vowels = 0;
```

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

```
    fgets(str, 100, stdin);
```

```
    for (i = 0; str[i] != '\0'; i++)
```

```
    {  
        if (str[i] == 'a' || str[i] == 'e' || str[i] == 'i' || str[i] == 'o' ||  
            str[i] == 'u' ||  
            str[i] == 'A' || str[i] == 'E' || str[i] == 'I' || str[i] == 'O' ||  
            str[i] == 'U')
```

```
        {  
            vowels++;
```

```
        }  
    }
```

```
    printf("Number of vowels in the string: %d\n", vowels);
```

```
    return 0;
```

```
}
```

/tmp/306v70nwK0.o

Enter a string: mahipal

Number of vowels in the string: 3

<pre>1 #include <stdio.h> 2 3 int main() 4 { 5 char ch; 6 7 printf("Enter a character: "); 8 scanf("%c", &ch); 9 10 if ((ch >= 'a' && ch <= 'z') (ch >= 'A' && ch <= 'Z')) 11 { 12 printf("%c is an alphabet.\n", ch); 13 } 14 else 15 { 16 printf("%c is not an alphabet.\n", ch); 17 } 18 19 return 0; 20 } 21</pre>	<pre>/tmp/306v70nwK0.o Enter a character: l l is an alphabet.</pre>
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<pre>1 #include <stdio.h> 2 3 int main() 4 { 5 int num; 6 7 printf("Enter a number: "); 8 scanf("%d", &num); 9 10 if (num % 5 == 0 && num % 11 == 0) 11 { 12 printf("%d is divisible by 5 and 11.\n", num); 13 } 14 else 15 { 16 printf("%d is not divisible by both 5 and 11.\n", num); 17 } 18 19 return 0; 20 } 21</pre>	<pre>/tmp/306v70nwK0.o Enter a number: 55 55 is divisible by 5 and 11.</pre>
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main.c		Output
<pre>1 #include <stdio.h> 2 3 int main() 4 { 5 int num; 6 7 printf("Enter a number: "); 8 scanf("%d", &num); 9 10 if (num > 0) 11 { 12 printf("%d is positive.\n", num); 13 } 14 else if (num < 0) 15 { 16 printf("%d is negative.\n", num); 17 } 18 else 19 { 20 printf("The number is zero.\n"); 21 } 22 23 return 0; 24 }</pre>	<pre>/tmp/306v70nwK0.o Enter a number: 5 5 is positive.</pre>	

<pre>1 #include <stdio.h> 2 3 int main() 4 { 5 int decimal, remainder, binary = 0, base = 1; 6 7 printf("Enter a decimal number: "); 8 scanf("%d", &decimal); 9 10 while (decimal > 0) 11 { 12 remainder = decimal % 2; 13 binary = binary + remainder * base; 14 base = base * 10; 15 decimal = decimal / 2; 16 } 17 18 printf("The binary equivalent is: %d\n", binary); 19 20 return 0; 21 }</pre>	<pre>/tmp/306v70nwK0.o Enter a decimal number: 11 The binary equivalent is: 1011</pre>
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