iswupper *Test for Upper-Case Wide Character (C99)* `<wctype.h>`

```
int iswupper(wint_t wc);
```

Returns A nonzero value if `wc` corresponds to an upper-case letter or is one of a locale-specific set of wide characters for which none of `iswcntrl`, `iswdigit`, `iswpunct`, or `iswspace` is true. Returns zero otherwise. *25.6*

---

iswxdigit *Test for Hexadecimal-Digit Wide Character (C99)* `<wctype.h>`

```
int iswxdigit(wint_t wc);
```

Returns A nonzero value if `wc` corresponds to a hexadecimal digit (`0–9`, `a–f`, `A–F`) and zero otherwise. *25.6*

---

isxdigit *Test for Hexadecimal Digit* `<ctype.h>`

```
int isxdigit(int c);
```

Returns A nonzero value if `c` is a hexadecimal digit (`0–9`, `a–f`, `A–F`) and zero otherwise. *23.5*

---

labs *Long Integer Absolute Value* `<stdlib.h>`

```
long int labs(long int j);
```

Returns Absolute value of `j`. The behavior is undefined if the absolute value of `j` can't be represented. *26.2*

---

ldexp *Combine Fraction and Exponent* `<math.h>`

```
double ldexp(double x, int exp);
float ldexpf(float x, int exp);
long double ldexpl(long double x, int exp);
```

Returns $x \times 2^{exp}$. A range error may occur. *23.3*

---

ldiv *Long Integer Division* `<stdlib.h>`

```
ldiv_t ldiv(long int numer, long int denom);
```

Returns An `ldiv_t` structure containing members named `quot` (the quotient when `numer` is divided by `denom`) and `rem` (the remainder). The behavior is undefined if either part of the result can't be represented. *26.2*

---

lgamma *Logarithm of Gamma Function (C99)* `<math.h>`

```
double lgamma(double x);
float lgammaf(float x);
long double lgammal(long double x);
```

Returns $\ln(|\Gamma(x)|)$, where Γ is the gamma function. A range error occurs if `x` is too large and may occur if `x` is a negative integer or zero. *23.4*

---

llabs *Long Long Integer Absolute Value (C99)* `<stdlib.h>`

```
long long int llabs(long long int j);
```