MATHEMATICAL FUNCTIONS

Exercises:

1)
```
int p=10000, r=10, t=5;
float si, ci;
si = (p*r*t)/100.0;
ci = p*pow((1+r/100.0), t) - p;
printf("Simple Interest = %0.2f\n", si);
printf("Compound Interest = %0.2f", ci);
```

2)
```
int n=5, i;
float sum=0;
for(i=1; i<=n; i++)
        sum+=(pow(i, 1.0/i)/exp(i));
printf("Sum = %.2f", sum);
```

Interview Questions:

1) Difference between round() and trunc() functions.

round()	**trunc()**
1) It returns the nearest integer by rounding off the	1) It returns the integral part, after removing the decimal

argument passed as parameter.	part of the argument passed as parameter.
2) e.g. round(5.7) gives us 6	2) e.g. trunc(5.7) gives us 5

2) Difference between abs() and fabs().

abs()	**fabs()**
1) It returns the absolute value of integers.	1) It returns the absolute value of any real number.
2) Defined in stdlib.h	2) Defined in math.h
3) e.g. abs(-5) gives us 5	3) e.g. fabs(-5.7) gives us 5.7

3) a

4) thx = sinh(x)/cosh(x);

5) shx = (1 – exp(2*x))/(2*exp(-x));