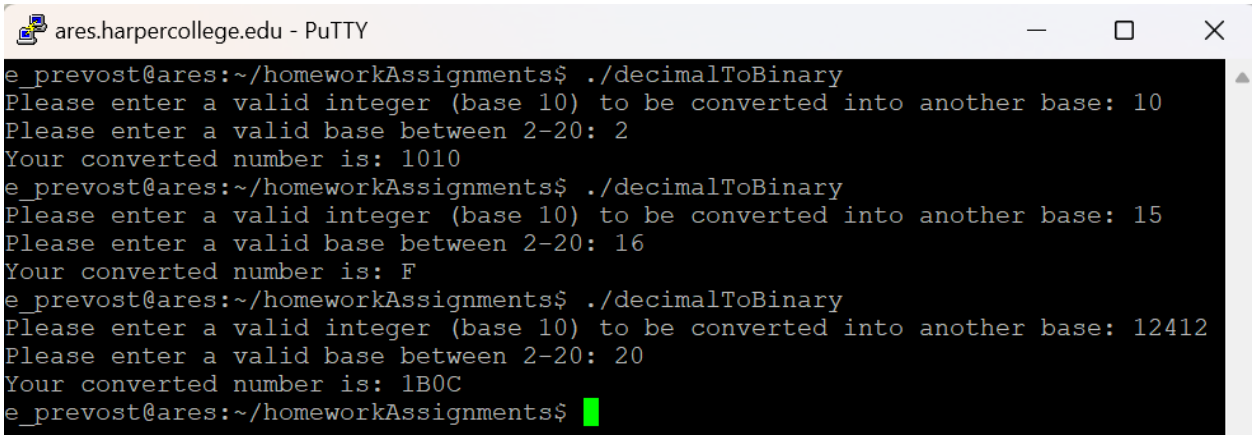
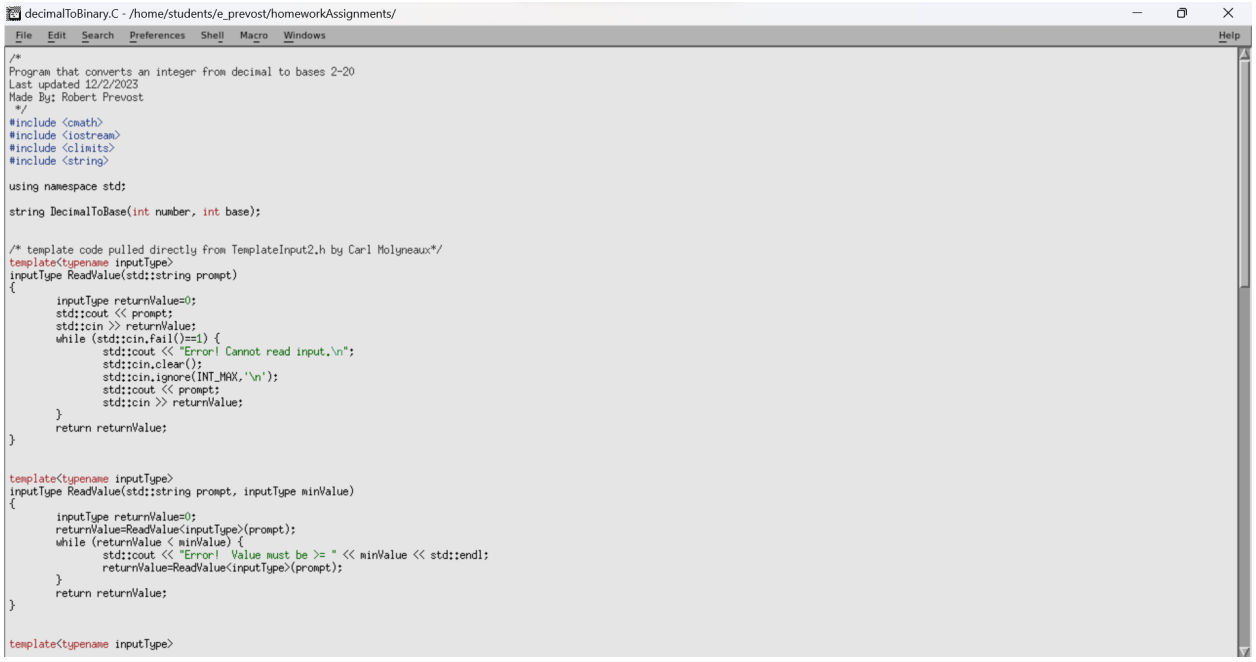
Decimal To String - Robert P.

Test Outputs:



Source Code:



```
inputType ReadValue(std::string prompt, inputType minValue, inputType maxValue)
{
        inputType returnValue=0;
        returnValue=ReadValue<inputType>(prompt,minValue);
        while (returnValue > maxValue) {
                std::cout << "Error!  Value must be <= " << maxValue << std::endl;
                returnValue=ReadValue<inputType>(prompt,minValue);
        }
        return returnValue;
}
int main()
{
        int num = ReadValue<int>("Please enter a valid integer (base 10) to be converted into another base: ",0);
        int base = ReadValue<int>("Please enter a valid base between 2-20: ");
        string conversion = DecimalToBase(num,base);

        cout<< "Your converted number is: " << conversion << endl;
}
string DecimalToBase(int number, int base)
{

        //static_cast<string>(remainder);
        string returnString = "";

        while(number > 0){
                int r = number%base;
                string remainder = to_string(r);
                switch(r){
                        case 10:
                                remainder = 'A';
                                break;
                        case 11:
                                remainder = 'B';
                                break;
                        case 12:
                                remainder = 'C';
                                break;
                        case 13:
                                remainder = 'D';
                                break;
                        case 14:
                                remainder = 'E';
                                break;
                        case 15:
                                remainder = 'F';
                                break;
                        case 16:
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                                remainder = 'G';
                                break;
                        case 17:
                                remainder = 'H';
                                break;
                        case 18:
                                remainder = 'I';
                                break;
                        case 19:
                                remainder = 'J';
                                break;
                }

                returnString += remainder;

                number = number / base;
        }
        string returnString2 = "";
        //flip the return string
        int len = returnString.length();
        for(int i=len-1; i>=0;i--){
                returnString2 += returnString[i];
        }

        return returnString2;
}
```