Appendix A: Basic System Controls

Many data validation edits and controls are designed into ERP systems like SAP. For this assignment use these definitions for these controls.

Control Type	Definition
Field check	Check to determine that entered field value exists in pre- defined list of valid values. (SAP)
Sign check	Check to determine if the positivity of negativity of a
	number is correct vs. predefined rules in the context.
Limit check	Check to determine if a value entered into system does not
	exceed a predetermined amount. E.g. payroll checks should
	not exceed \$4,000 USD. If a check exceeds this amount, the
	data would be rejected for further verification /
	authorization. (CISA)
Range check	Check to assure input data value falls within a
	predetermined range of values. E.g. product type codes
	range from 100 to 250. Any code outside this range is
	rejected as an invalid product type. (CISA)
Completeness	Having all necessary or normal parts, components, or steps.
check	Required fields checked to assure they do not contain blanks or zeroes. (CISA)
Validity check	Programmed check of data in accordance with
	predetermined criteria / logic, business rules. E.g. a payroll
	record contains a field for marital status and the acceptable
	values are M or S. If any other code is entered the record is
	rejected. (CISA)
Reasonableness	Input data matched to predetermined reasonable limits or
test	occurrence rates. E.g. a widget manufacturer usually
	receives orders for not more than 20 widgets. If order is for
	more than 20 widgets, the system prints the order record
	with a warning indicating the order appear unreasonable.
	(CISA)

CISA: Exhibit 2.29 Data Validation Edits and Controls. CISA Review Manual 2015 ISACA