

## 4. Result and Discussion:

### Evaluation results:

#### Accuracy on Mnist:

Model	On validation set	On test set
VGG16	99.61%	99.68%
ResetNet164	99.72%	99.70%
MobileNet	99.63%	99.68%
WideResNet28-10	<b>99.73%</b>	<b>99.76%</b>

Table i

#### Precision on Mnist:

Model	On validation set	On test set
VGG16	98.58%	98.68%
ResetNet164	98.23%	98.54%
MobileNet	<b>98.89%</b>	<b>98.93%</b>
WideResNet28-10	98.71%	98.72%

Table ii

#### F1 Score on Mnist:

Model	On validation set	On test set
VGG16	99.58%	99.71%
ResetNet164	99.63%	99.74%
MobileNet	<b>99.89%</b>	<b>99.90%</b>
WideResNet28-10	99.78%	99.81%

Table iii

From the above results, we see that WideResNet28-10 having multiple layers provides a better accuracy, whereas MobileNet due to its portable nature provides better precision and F1 Score. We also saw that MobileNet pre-trained being the smallest in size took the least run-time while evaluating the model.

