3.ANALYSIS

Reliability:

Reliability is the degree to which an assessment tool produces stable and consistent results. Types of Reliability. Test-retest reliability is a measure of reliability obtained by administering the same test twice over a period of time to a group of individuals.

Flexibility:

Flexibility is the ease with which the system can be reused, deployed, and tested.

Performance:

The system must be interactive and the delays involved must be less. So in every action-response of the system, there are no immediate delays. In case of opening windows forms, of popping error messages and saving the settings or sessions there is delay much below 2 seconds, in case of obtaining outputs there should be quick evaluation and other operations to be performed.

Security:

There will be no major security breaches for the system as it will be used mainly by the professionals and not everyone in the system. They should be careful in order to prevent the data from leaking outside. They should be also careful regarding any hacks that may occur.

Data Analysis:

The main data here in our picking system is the name of our items and their locations in the warehouse. The locations will be in form of coordinate points.

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Mobiles 2 8 15000 Laptops 7 5 45000 Refrigerators 9 12 50000 Air Conditioners 42 36 35000 PenDrives 3 5 200 HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 30 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 30 Hair Dryers 18 26 2000 Trimmers 22 24 1000	ITEMS	X COORDINATE	Y COORDINATE	PRICE(each in Rs.)	QUANTITY
Bags 26 35 500 3 Books 4 6 500 3 Mobiles 2 8 15000 Laptops 7 5 45000 Refrigerators 9 12 50000 Air Conditioners 42 36 35000 PenDrives 3 5 2000 HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37	Watches	50	35	1000	300
Books 4 6 500 1 Mobiles 2 8 15000 1 Laptops 7 5 45000 8 Refrigerators 9 12 50000 5000 Air Conditioners 42 36 35000 9 PenDrives 3 5 2000 4 HDD 24 37 6000 6 Flash Cards 45 20 5000 5000 Bottles 35 8 300 5 Fans 9 24 1000 6 Ear Phones 5 24 1500 6 Electic Bulbs 8 8 150 6 Deodrants 33 26 700 70 Vaccum Cleaners 36 40 5000 5000 Sandals 43 25 300 6 Cameras 29 24 25000 6	Televisions	37	39	40000	100
Mobiles 2 8 15000 Laptops 7 5 45000 Refrigerators 9 12 50000 Air Conditioners 42 36 35000 PenDrives 3 5 2000 HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 30 Hair Dryers 18 26 2000 Trimmers 22 24 1000	Bags	26	35	500	500
Laptops 7 5 45000 Refrigerators 9 12 50000 Air Conditioners 42 36 35000 PenDrives 3 5 2000 HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 30 Hair Dryers 18 26 2000 Trimmers 22 24 1000 <td>Books</td> <td>4</td> <td>6</td> <td>500</td> <td>1000</td>	Books	4	6	500	1000
Refrigerators 9 12 50000 Air Conditioners 42 36 35000 PenDrives 3 5 2000 HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 Washing Machines 29 35 4000	Mobiles	2	8	15000	300
Air Conditioners 42 36 35000 PenDrives 3 5 2000 HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 Washing Machines 29 35 40000 Shoes 20 41 2000 Goggles 30 42 1000 Kerchiefs <td< td=""><td>Laptops</td><td>7</td><td>5</td><td>45000</td><td>200</td></td<>	Laptops	7	5	45000	200
PenDrives 3 5 2000 HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 Washing Machines 29 35 40000 Shoes 20 41 2000 10 Goggles 30 42 1000	Refrigerators	9	12	50000	100
HDD 24 37 6000 Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 Washing Machines 29 35 40000 Shoes 20 41 200 1 Goggles 30 42 100 1 Kerchiefs 35 45	Air Conditioners	42	36	35000	100
Flash Cards 45 20 5000 Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 10 Shoes 20 41 2000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15	PenDrives	3	5	2000	400
Bottles 35 8 300 Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15	HDD	24	37	6000	250
Fans 9 24 1000 Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 6 Shoes 20 41 200 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23	Flash Cards	45	20	5000	150
Ear Phones 5 24 1500 Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 6 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 23 32 100	Bottles	35	8	300	675
Electic Bulbs 8 8 150 Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 5 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 32 32 100	Fans	9	24	1000	570
Deodrants 33 26 700 Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 Washing Machines 29 35 40000 Shoes 20 41 2000 10 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 32 32 100	Ear Phones	5	24	1500	500
Vaccum Cleaners 36 40 5000 Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 Washing Machines 29 35 40000 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Electic Bulbs	8	8	150	450
Sandals 43 25 300 Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Deodrants	33	26	700	400
Cameras 29 24 25000 Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 1 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 5 Cosmetcis 44 21 600 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Vaccum Cleaners	36	40	5000	150
Power Banks 46 27 5000 Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 4 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 5 Cosmetcis 44 21 600 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 32 32 100 4	Sandals	43	25	300	850
Blankets 25 37 300 Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 32 32 100	Cameras	29	24	25000	225
Hair Dryers 18 26 2000 Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 6 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Power Banks	46	27	5000	200
Trimmers 22 24 1000 Soaps 18 20 50 5 Washing Machines 29 35 40000 6 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Blankets	25	37	300	700
Soaps 18 20 50 5 Washing Machines 29 35 40000 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Hair Dryers	18	26	2000	500
Washing Machines 29 35 40000 Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 32 32 100	Trimmers	22	24	1000	600
Shoes 20 41 2000 1 Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Soaps	18	20	50	5000
Goggles 30 42 1000 1 Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Washing Machines	29	35	40000	150
Kerchiefs 35 45 5 Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Shoes	20	41	2000	1000
Cosmetcis 44 21 600 Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Goggles	30	42	1000	1050
Shirts 15 17 1000 4 Pants 12 23 800 4 Chairs 23 32 100	Kerchiefs	35	45	5	900
Pants 12 23 800 4 Chairs 23 32 100	Cosmetcis	44	21	600	700
Chairs 23 32 100	Shirts	15	17	1000	4000
	Pants	12	23	800	4000
Tables 24 39 500	Chairs	23	32	100	600
	Tables	24	39	500	250

3.1 Available Data in Ware House

Here in our system we assume the warehouse as a co ordinate system and represent the points with the items with points. In the above mentioned datasets the x coordinates and y coordinates represent the ones on the X-axis and Y-axis respectively. The prices and the quantity of the items are also mentioned.

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