Coding task for Data Acquisition Intern (PHP)

1. a = [3, 1, 5, 13, 18, 2, 4], sort given array in ascending and descending order.

2. In numbers 1 to 500, print numbers divisible by 5.

3. a = [‘a’, ‘c’, ‘d’, ‘g’, ‘i’], b = [‘x’, ‘z’, ‘n’, ‘k’, ‘d’, ‘l’, ‘a’, ‘m’, ‘n’], Find common elements in array a and array b.

4. Create a CSV file with the following headers and insert at least one sample data.
    a. Name
    b. Phone
    c. Email
    d. Address

5. [“Trapper Wolf”, “Cara Dune”, “Bo-Katan Kryze”, “Paul Sun-Hyung Lee”, “Dee Bradley Baker”]
    a. Split names in an array by “First name”, “Middle name”, “Last name”
    Eg:
    ```
    First name: Paul
    Middle name: Sun-Hyung
    Last name: Lee

    First name: Cara
    Middle name:
    Last name: Dune
    ```

6. [“Maeve Millay”, “Bernard Lowe”, “Dolores Abernathy”, “Charlotte Hale”]. Remove the letter “a” (not “A”) from each element of an array.
    Eg: `[“Meve Milly”, “Bernrd Lowe”, …….]`

7. Write a function that accepts a string and returns 1 if it’s a valid password and 0 if it’s invalid. A valid password satisfies the following conditions.
    a. At least 8 characters and max 14.
    b. At least 1 numeric character.
    c. At least 1 capital letter and 1 lower letter
    d. At least 1 special character. Eg ($, !, #, &, *, etc)

8. Write a function that accepts two integers (x and y) and returns the sum of all the numbers between 1 to y and is divisible by x.
9. Reverse the “Specialties” order and remove all ‘null’ or empty key strings, from JSON below

{"addresses": [{"accepting_new_patients": true, "address_string": "1213 15th Ave W, Williston, ND 58801", "city": "Williston", "languages": [], "office_name": "", "pcp": null, "pcp_id": null, "phones": [{"type": "phone", "value": "(701) 572-7651"}], "state": "ND", "street_line_1": "1213 15th Ave W", "street_line_2": "", "zip": "58801"}], "group_affiliations": [], "hospital_affiliations": [], "networks": [{"name": "TieredChoice Network", "tier": ""}], "provider": {"accepting_new_patients": null, "facility_name": "CHI St. Alexius Health Williston Medical Center Primary Care", "facility_type": "Clinic", "first_name": null, "gender": null, "last_name": null, "license_number": "", "middle_name": null, "npi": null, "pcp": null, "pcp_id": null, "provider_type": "facility", "rating": {"scale": null, "score": null}, "site_uid": "ed83060feb270049a4a3bf978dc4acb3", "suffix": null, "title": null, "unparsed_name": "CHI St. Alexius Health Williston Medical Center Primary Care"}, "specialties": [{"name": "Family Medicine"}, {"name": "Internal Medicine"}, {"name": "Mental / Chemical Health Care"}, {"name": "Obstetrics & Gynecology"}, {"name": "Pain Medicine"}, {"name": "Pediatrics"}, {"name": "Radiation Oncology"}, {"name": "Urgent Care"}, {"name": "Urology"}]}

Please provide code and output.

10. Looking for a final output

```
Array (
“0” => Array (“label” => Appointment, “is_open” => 1, “open_time” => 10:00, “close_time” => 16:00)
“1” => Array (“label” => Checkup, “is_open” => 0, “open_time” => 12:00, “close_time” => 20:00)
)
```

From inputs below:

- `$x = array(0=>['label'=>Appointment,'is_open'=>1],1=>['label'=>Checkup,'is_open'=>0]);`
- `$y = array(0=>['open_time'=>'10:00'],1=>['open_time'=>'12:00']);`
- `$z = array(0=>['close_time'=>'16:00'],1=>['close_time'=>'20:00']);`