

**Exercice 1 – Un peu de Shell (5 pts)**

1. `df -h`
2. `df -h | grep "/home"`
3. `df -h | grep "/home" | cut -dG -f3`
4. `df -h | grep "/home" | cut -dG -f3 > dispo.txt`

**Exercice 2 – Chemin absolu (5 pts)**

```
# -*- coding: utf_8 -*-

def verification(path):
    return (path[0] == '/')

def directories(path):
    taille = len(path)
    i = 1
    result = ""
    while (i < taille):
        if (path[i] == '/'):
            result += ', '
        else:
            result += path[i]
        i = i + 1
    return result

absolu = raw_input("Donnez le chemin absolu : ");

while (not verification(absolu)):
    print "Erreur : vous n'avez pas donné un chemin absolu"
    absolu = raw_input("Donnez le chemin absolu : ");

print "Liste des répertoires contenus dans ce chemin : "
print directories(absolu)
```

**Exercice 3 – Conversion de dates (5 pts)**

1. 

```
def conversionMois(mois):
    liste = [ "janvier", "février", "mars", "avril", "mai", "juin", "juillet", "août", "septembre", "octobre", "novembre",
    "décembre" ]
    i = 0
    while (i < 12):
        if (mois == liste[i]):
            if (i < 9):
                return '0' + str(i+1)
            else:
                return str(i+1)
```



```
i = i + 1  
return str(-1)
```

```
2. def donneJour(date):  
    taille = len(date)  
    i = 0  
    spc = 0;  
    result = ""  
    while (i < taille):  
        if (spc == 1 and date[i] == ' '):  
            return result  
        else:  
            if (date[i] == ' '):  
                spc = spc + 1  
            else:  
                if (spc == 1):  
                    result += date[i]  
            i = i + 1  
    return "-1"
```

```
def donneMois(date):  
    taille = len(date)  
    i = 0  
    spc = 0;  
    result = ""  
    while (i < taille):  
        if (spc == 2 and date[i] == ' '):  
            return result  
        else:  
            if (date[i] == ' '):  
                spc = spc + 1  
            else:  
                if (spc == 2):  
                    result += date[i]  
            i = i + 1  
    return "-1"
```

```
def donneAnnee(date):  
    taille = len(date)  
    i = 0  
    spc = 0;  
    result = ""  
    while (i < taille):  
        if (spc == 3 and i == taille-1):  
            return result + date[i]  
        else:  
            if (date[i] == ' '):
```



```
    spc = spc + 1
else:
    if (spc == 3):
        result += date[i]
    i = i + 1
return "-1"
```

```
3. date = raw_input("Donnez une date au format long : ")
print "Conversion : " + donneJour(date) + '/' + conversionMois(donneMois(date)) + '/' + donneAnnee(date)
```

### Exercice 4 – Palindromes (5 pts)

```
1. def delEspace(phrase):
    result = ""
    i = 0
    taille = len(phrase)
    while (i < taille):
        if (phrase[i] != ' '):
            result += phrase[i]
        i = i + 1
    return result
```

```
2. def inverse(phrase):
    result = ""
    i = len(phrase)-1
    while (i >= 0):
        result += phrase[i]
        i = i - 1
    return result
```

```
3. def palindrome(phrase):
    chaine = delEspace(phrase)
    return (chaine == inverse(chaine))
```

```
4. chaine = raw_input("Donnez une chaîne à tester : ")
if (palindrome(chaine)):
    print "C'est un palindrome !"
else:
    print "Ce n'est pas un palindrome !"
```